

IN DEPTH INSPECTION REPORT

D031085

P.I.N. 3501.60

B.I.N. 1093572

TEAM LEADER	<u>Logan Bessel, P.E.</u>	<u>98781</u> NYSPE LICENSE #
ASSISTANT TEAM LEADER	<u>Devin Bush</u>	
ASSISTANT TEAM LEADER	<u>Brendan Cataldo</u>	
ASSISTANT TEAM LEADER	<u>Samantha Lusher</u>	
FEATURE CARRIED	<u>I-481 Northbound</u>	
FEATURE CROSSED	<u>CSX Transportation and AMTRAK</u>	
DATE FIELD WORK BEGAN	<u>April 25, 2022</u>	
DATE FIELD WORK COMPLETED	<u>May 11, 2022</u>	

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BIN 1093572**Purpose of Inspection**

In-depth inspection was performed in 2013 and 2014 as part of PIN 3501.60; I-81 Viaduct Replacement project. This report serves to update the documentation of the existing bridge elements which will be rehabilitated as part of Phase 1 of the I-81 Viaduct project.

Visual Inspection

The general observations of this bridge during this inspection include concrete cracking and spalling. The structural steel is showing signs of section loss. The bearings appear to be seized and no longer functioning as designed.

The field observations are shown on the plans. Below is a brief summary of conditions for each feature.

Superstructure

Deck – Deck is anticipated to be replaced in Phase 1

Steel – See Structural Steel Inspection Summary

Bearings – Bearings typically contained pack rust and did not appear to be functioning as intended. Pedestals contain cracking and spalling.

Substructure

Begin Abutment – Concrete backwall contained widespread map-cracking across the entire length and isolated areas of delaminated and spalled concrete near the deck joint.

Pier 1 – Concrete cap beam contains isolated areas of cracked and delaminated concrete. The concrete columns also exhibit isolated delaminated concrete, cracking, and isolated areas of spalled concrete.

Pier 2 – The concrete cap beam contains widespread areas of delaminated and spalled concrete. The columns also contain widespread areas of delaminated and cracked concrete. The crash wall contains widespread areas of delaminated and cracked concrete.

Pier 3 – The concrete cap beam contains delaminated and spalled concrete. The concrete columns also contain widespread areas of delaminated and cracked concrete. The crash wall contains widespread areas of map-cracked, delaminated and spalled concrete with exposed rebar.

Pier 4 – This pier is located directly adjacent to a salt storage shed. A portion of the crash wall was not accessible due to the salt storage shed proximity. Salt-laden runoff from the salt storage shed was puddled near the face of the crash wall during the inspection. The concrete cap beam contains widespread areas of delaminated concrete. Additionally, cracks are forming in the cap beam above column 2 on both faces of the cap beam. The columns also contain widespread areas of delaminated concrete. The crash wall contains widespread areas of map-cracked, delaminated and spalled concrete.

Pier 5 – The cap beam contains isolated areas of delaminated and cracked concrete. The concrete columns contain isolated areas of delaminated and cracked concrete. Spalled concrete noted from the 2013 inspection have since been repaired.

Pier 6 – The cap beam contains isolated areas of delaminated and cracked concrete. The columns also contain isolated areas of delaminated, cracked and spalled concrete.

Pier 7 – The cap beam contains isolated areas of delaminated and cracked concrete. The columns also contain isolated areas of delaminated, cracked and spalled concrete.

Pier 8 – The cap beam contains isolated areas of delaminated and cracked concrete. The columns also contain isolated areas of delaminated, cracked and spalled concrete.

Pier 9 – The cap beam contains isolated areas of delaminated and cracked concrete. The columns also contain isolated areas of delaminated, cracked and spalled concrete.

Pier 10 – The cap beam contains isolated areas of delaminated and cracked concrete. The columns also contain isolated areas of delaminated, and cracked concrete.

Pier 11 – The cap beam contains widespread areas of delaminated and cracked concrete. The columns also contain widespread areas of delaminated, and cracked concrete.

Pier 12 – The cap beam contains isolated areas of delaminated and cracked concrete. The columns also contain isolated areas of delaminated, cracked, and spalled concrete.

Pier 13 – The cap beam contains widespread areas of delaminated and cracked concrete. The columns also contain isolated areas of delaminated, cracked, and spalled concrete.

Pier 14 – The cap beam contains isolated areas of delaminated and cracked concrete. The columns also contain isolated areas of delaminated, cracked, and spalled concrete.

End Abutment – Concrete backwall contained widespread map-cracking and areas of delaminated and spalled concrete. The pedestals contained generally

sound concrete. The wingwalls exhibit isolated delaminated and spalled concrete and widespread map-cracking.

BIN 1093572**Special Emphasis Inspection Required**

Non-Redundant/Fracture Critical Members – No

Pin and Hangers – No

Fatigue-Prone Welds – Yes

Non-Categorized Fatigue-Prone Details – No

Other (Specified in Text) – High Rocker Bearings, Steel Web Bearing Areas

Special Emphasis Details

Special emphasis details exist in the form of category D, E, and E' welds. Additionally, high rocker bearings are present. As a result of deterioration, the steel webs within the bearing areas are also of special emphasis. These require 100% hands-on inspection.

Overall Steel Condition

The steel showed signs of deterioration. In general, the bottom flange of the fascia beams, girder ends of all beams were showing signs of section loss. Some girder ends contain holes resulting from excessive corrosion. Some cross frames were bent, buckled, or broken as a result of corrosion or receipt of unanticipated loading.

Paint

The paint system was generally failing over the entire structure. The paint failure ranges from flaking paint, to measurable section loss of steel members.

Section Loss

Section loss readings were taken at various points along the bridge. The readings are depicted on the framing plans of each span attached. In general, the areas of most significant loss were the lower six (6) inches of the web and the bottom flange. Additionally, the ends of the girders experienced section loss within the bearing area. The section loss at the girder ends consists of holes corroded through the webs at several locations.

IN-DEPTH CONDITION DOCUMENTATION

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	1-690-3(28) 1-481-2(116)	183	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

**ELEVATION A-A
SOUTHEAST
WINGWALL**

26'-0"W x 6'-6"H
MAPCRACKING
169.0 SF

PILE LAYOUT
Scale 1/8" = 1'-0"

PLAN
Scale 1/4" = 1'-0"

LEGEND

- Hollow Concrete (HC)
- Spall (S)
- Patch/Repair
- Crack (C)
- Hairline Crack (HL)
- Core Location

INSIDE WINGWALL
FACE MAPCRACKING
7'-2" x 2'-1"
14.9 SF

QUANTITIES:

SPALL AREAS: 0.3 SF + 0.4 SF = **0.7 SF**
 HOLLOW AREAS: **4.0 SF**
 MAP CRACKED AREAS: 169 SF + 14.9 SF + 13.8 SF + 70 SF + 484.1 SF = **751.8 SF**
 TOTAL LENGTH OF CRACKS: **1.5 LF**

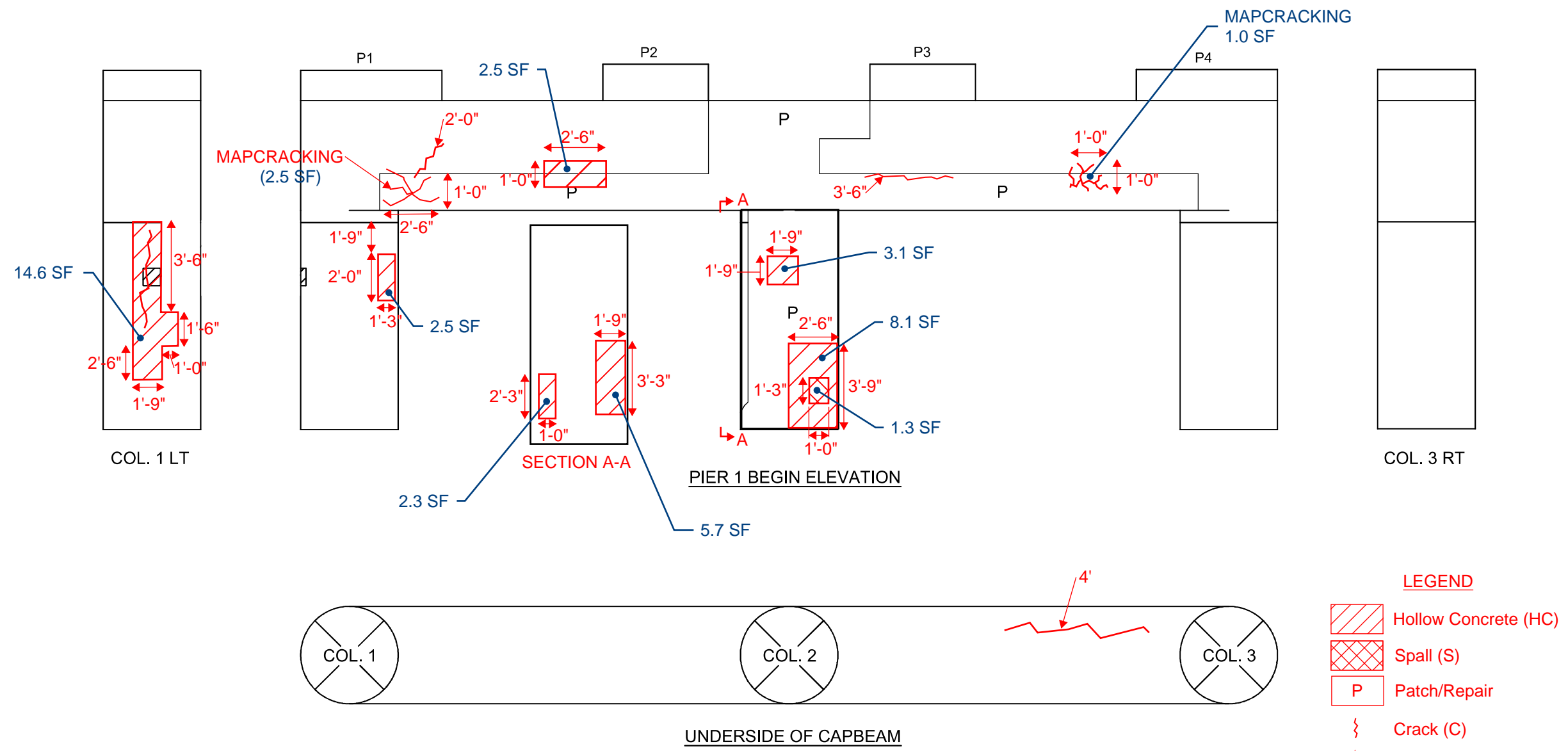
ELEVATION
Scale 1/4" = 1'-0"

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS
NORTHBOUND BIN 1093572
SOUTH ABUTMENTS
DRAWING NO. 5 OF 47

PROJECT ENGINEER: R. PUGH
IN CHARGE OF: E. PUGH
DESIGNED BY: D. PUGH
DESIGN CHECKED BY: A. PUGH
DETAILED BY: D. PUGH
DETAIL CHECKED BY: K. PUGH

PIER 1 DETERIORATION SKETCH

NOT TO SCALE



QUANTITIES:
SPALL AREAS: 1.3 SF
HOLLOW AREAS: 14.6 SF + 2.5 SF + 2.3 SF + 5.7 SF + 3.1 SF + 8.1 SF + 2.5 SF = 38.8 SF
MAP CRACKED AREAS: 2.5 SF + 1.0 SF = 3.5 SF
TOTAL LENGTH OF CRACKS: 9.5 LF

LEGEND

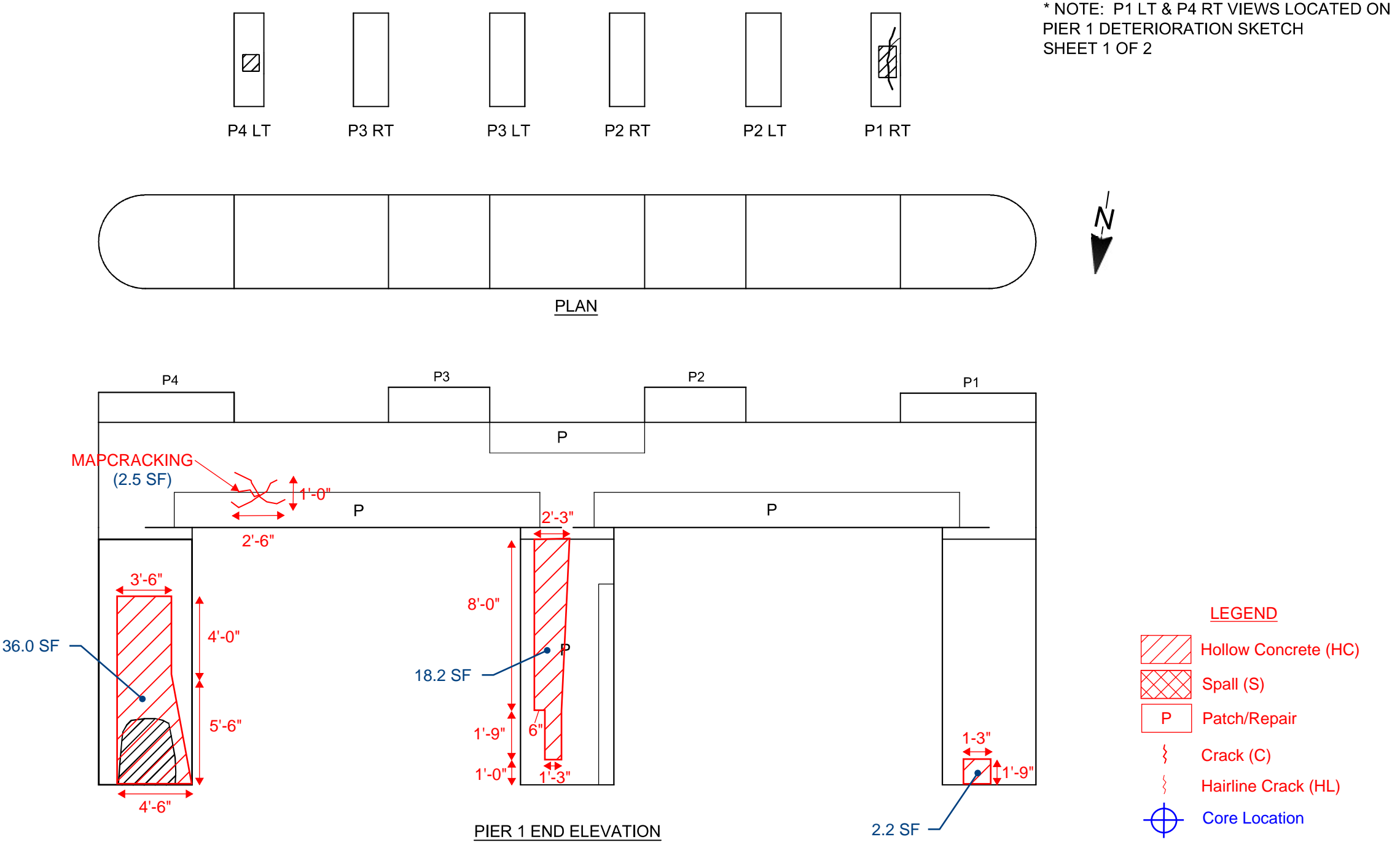
- Hollow Concrete (HC)
- Spall (S)
- Patch/Repair
- Crack (C)
- Hairline Crack (HL)
- Core Location

LEGEND

- Hollow Concrete (HC)
- Spall (S)
- Patch
- Crack (C)
- Hairline Crack (HL)

PIER 1 DETERIORATION SKETCH

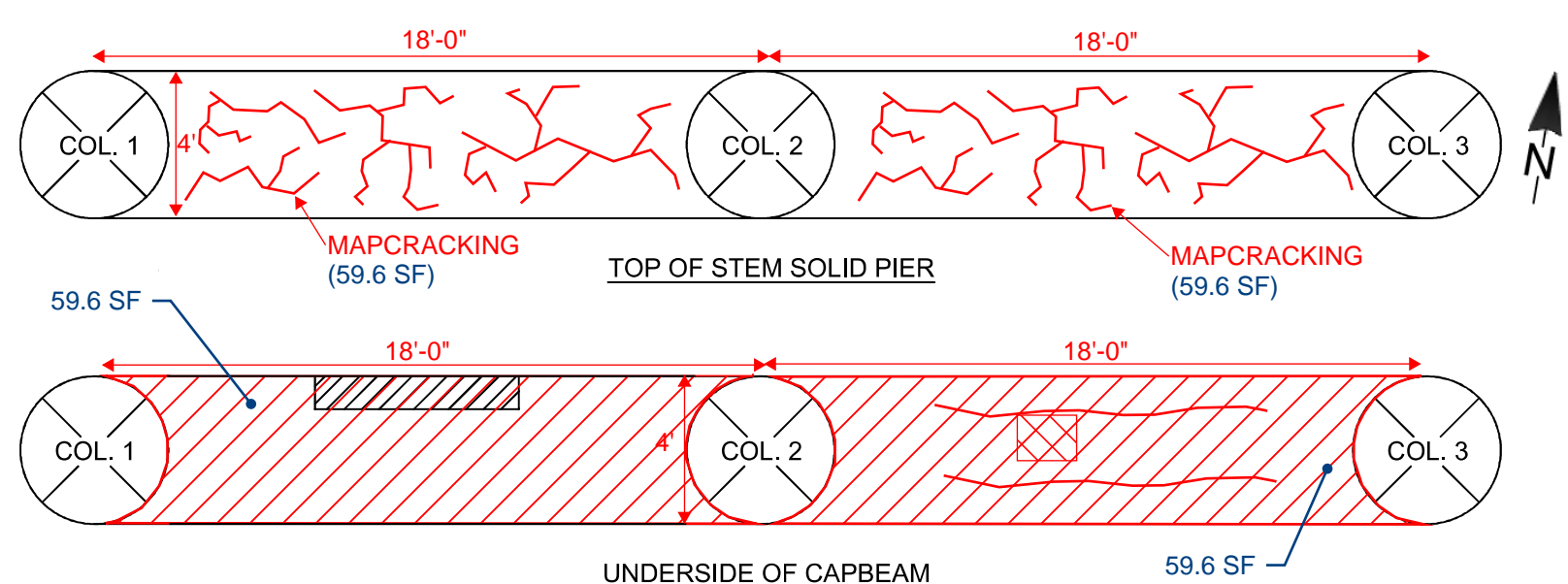
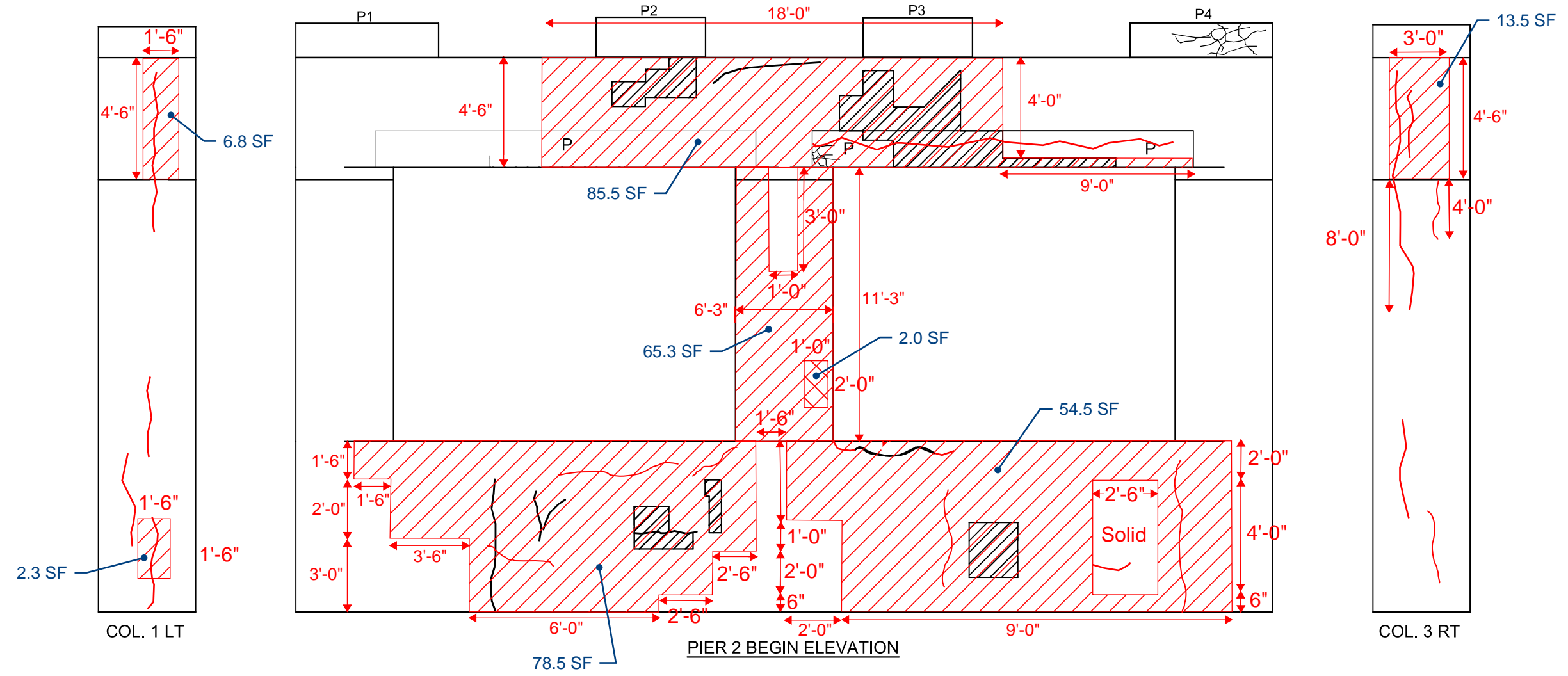
NOT TO SCALE



QUANTITIES:
SPALL AREAS: **0.0 SF**
HOLLOW AREAS: 36.0 SF + 18.2 SF + 2.2 SF = **56.4 SF**
MAP CRACKED AREAS: **2.5 SF**
TOTAL LENGTH OF CRACKS: **0.0 LF**

PIER 2 DETERIORATION SKETCH

NOT TO SCALE



LEGEND

- Hollow Concrete (HC)
- Spall (S)
- Patch/Repair
- Crack (C)
- Hairline Crack (HL)
- Core Location

LEGEND

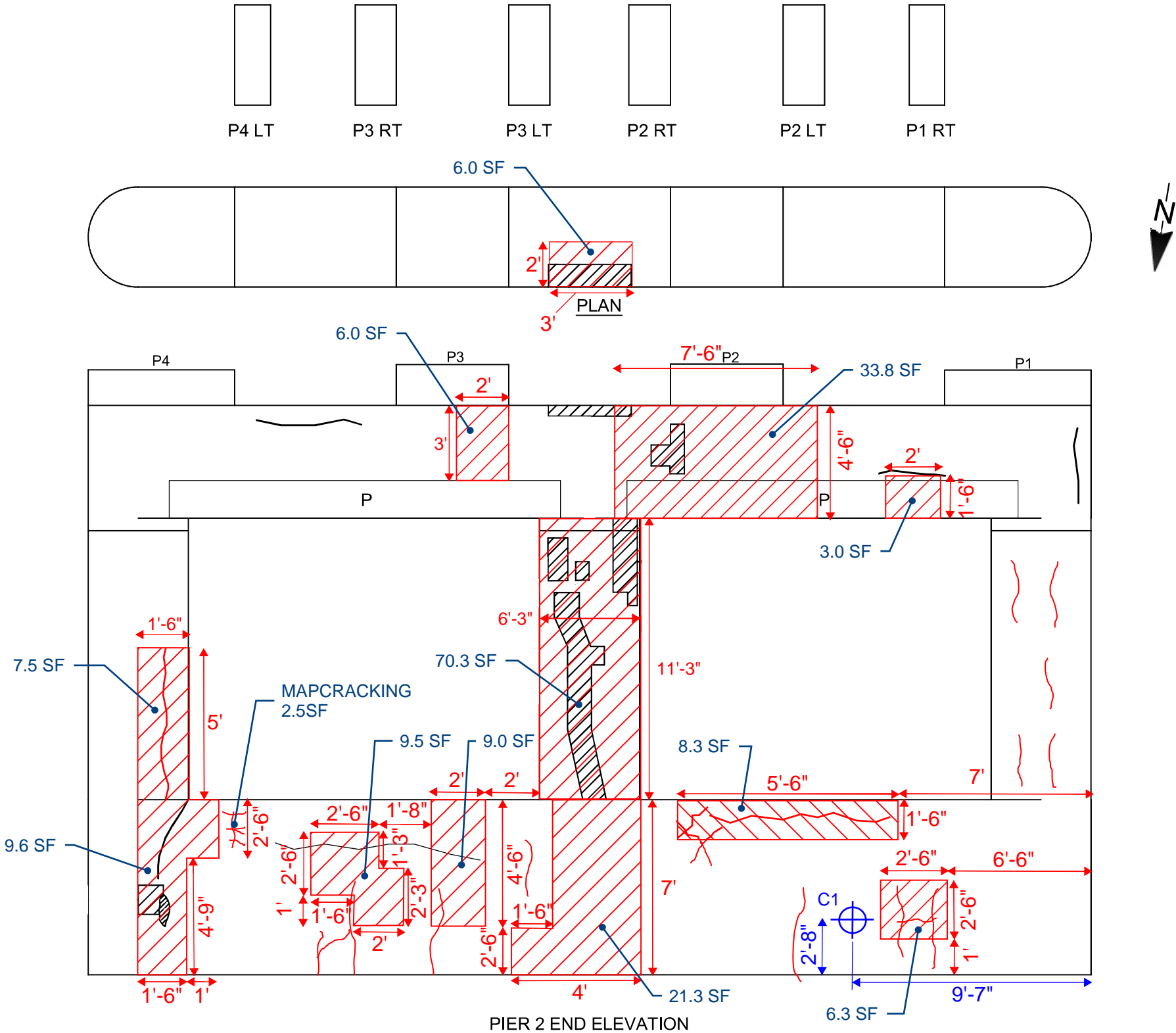
- Hollow Concrete (HC)
- Spall (S)
- Patch
- Crack (C)
- Hairline Crack (HL)

QUANTITIES:
SPALL AREAS: 2.0 SF
HOLLOW AREAS: 6.8 SF + 2.3 SF + 78.5 SF + 54.5 SF + 65.3 SF + 85.5 SF 13.5 SF + 59.6 SF + 59.6 SF = 425.6 SF
MAP CRACKED AREAS: 59.6 SF + 59.6 SF = 119.2 SF
TOTAL LENGTH OF CRACKS: 41.5 LF

PIER 2 DETERIORATION SKETCH

NOT TO SCALE

* NOTE: P1 LT & P4 RT VIEWS LOCATED ON
PIER 2 DETERIORATION SKETCH
SHEET 1 OF 2



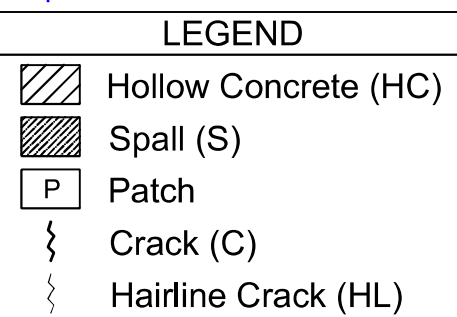
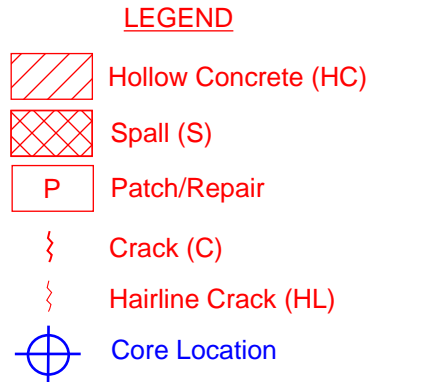
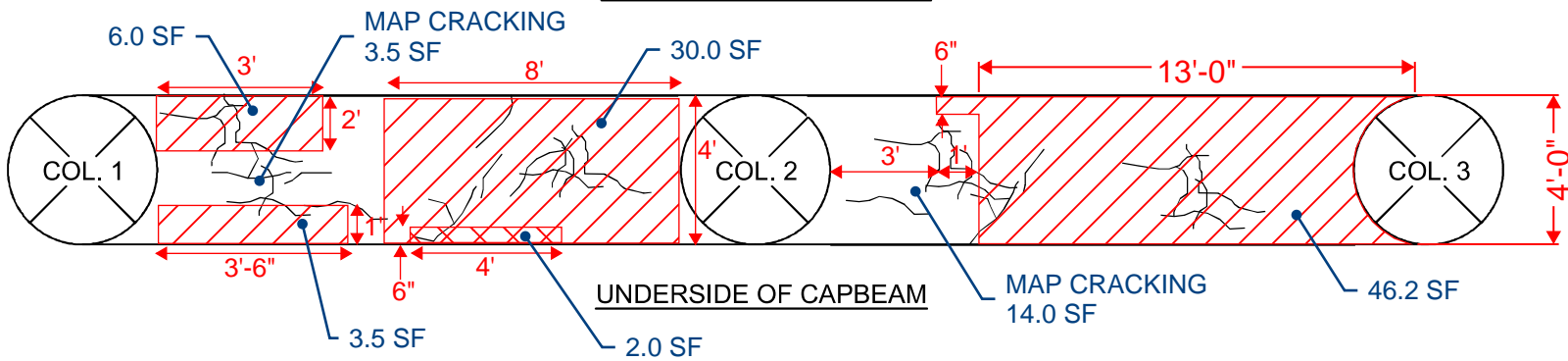
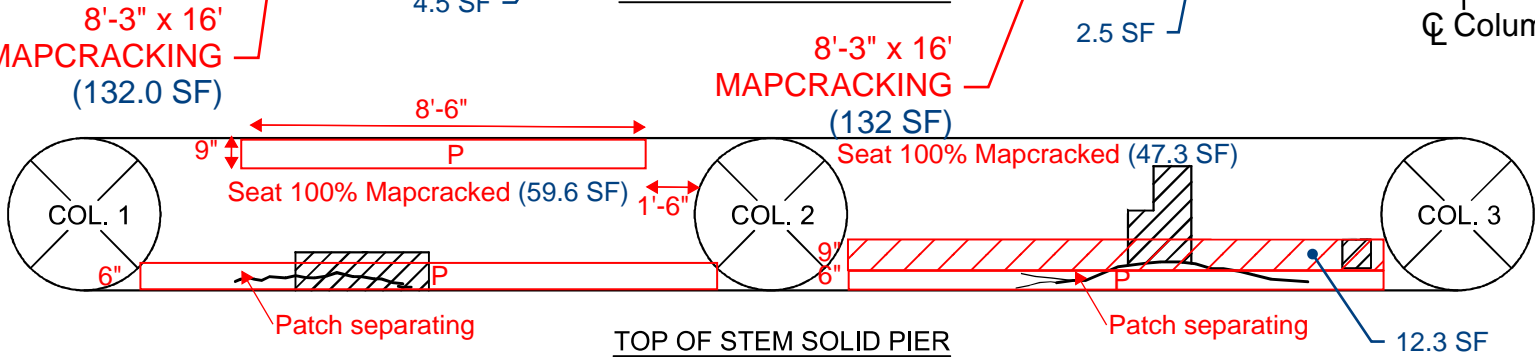
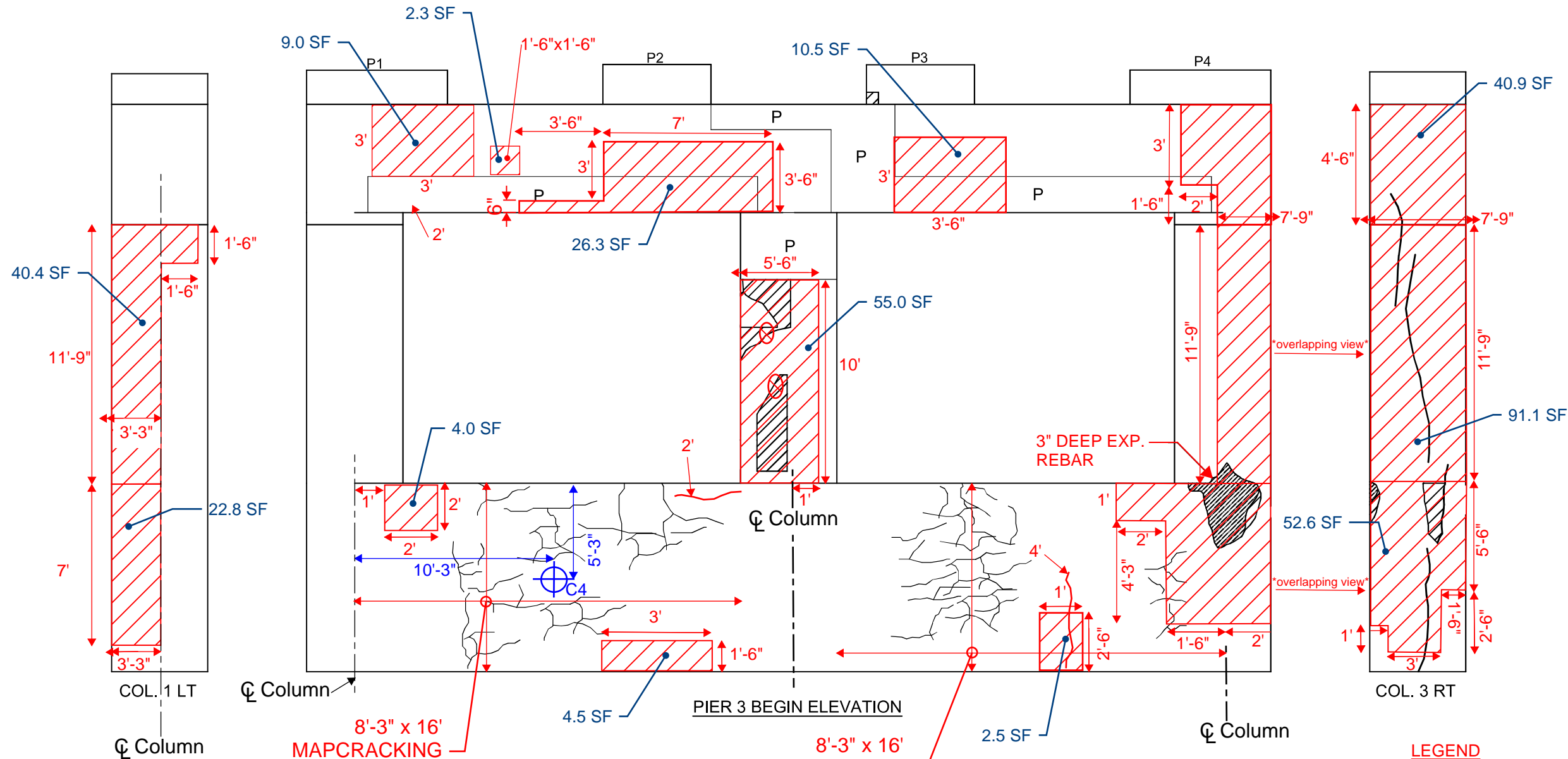
- LEGEND**
- Hollow Concrete (HC)
 - Spall (S)
 - Patch/Repair
 - Crack (C)
 - Hairline Crack (HL)
 - Core Location

- LEGEND**
- Hollow Concrete (HC)
 - Spall (S)
 - Patch
 - Crack (C)
 - Hairline Crack (HL)

QUANTITIES:
SPALL AREAS: 0.0 SF
HOLLOW AREAS: 9.6 SF + 7.5 SF + 9.5 SF + 9.0 SF + 21.3 SF + 8.3 SF + 6.3 SF + 6.0 SF + 33.8 SF + 3.0 SF + 6.0 SF = **120.3 SF**
MAP CRACKED AREAS: **2.5 SF**
TOTAL LENGTH OF CRACKS: **41 LF**

PIER 3 DETERIORATION SKETCH

NOT TO SCALE



QUANTITIES:
SPALL AREAS: **2.0 SF**

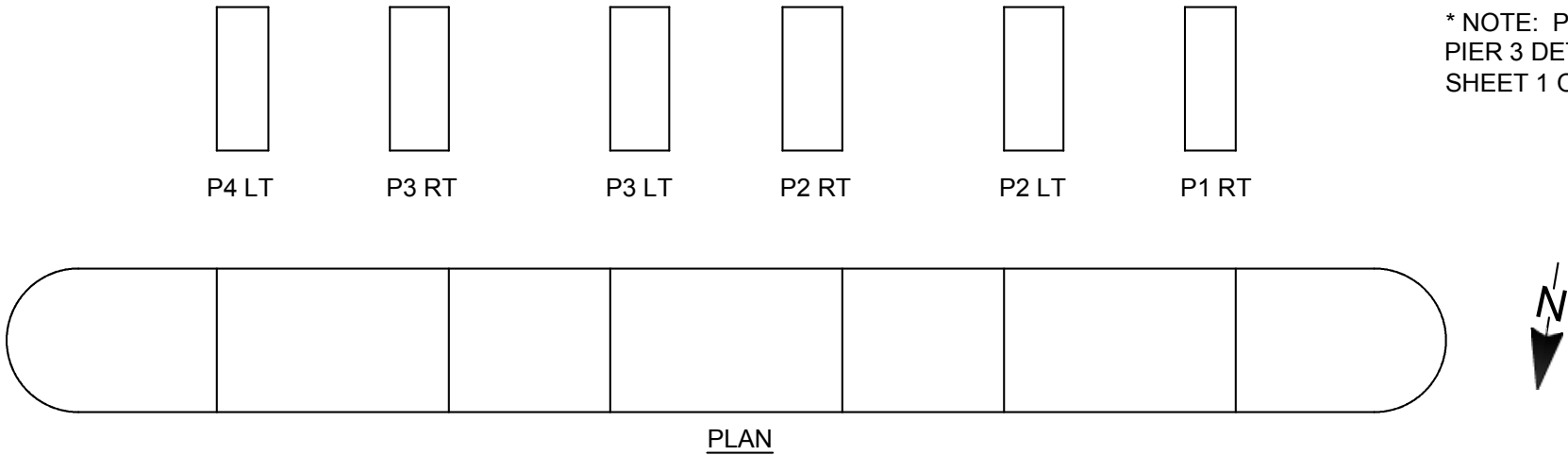
HOLLOW AREAS: 40.4 SF + 22.8 SF + 9.0 SF + 2.3 SF + 26.3 SF + 10.5 SF + 40.9 SF + 55.0 SF + 4.0 SF + 4.5 SF + 2.5 SF + 12.3 SF + 6.0 SF + 3.5 SF + 30.0 SF + 46.2 SF = **316.2 SF**

MAP CRACKED AREAS: 132.0 SF + 132.0 SF + 59.6 SF + 47.3 SF + 14.0 SF + 3.5 SF = **388.4 SF**

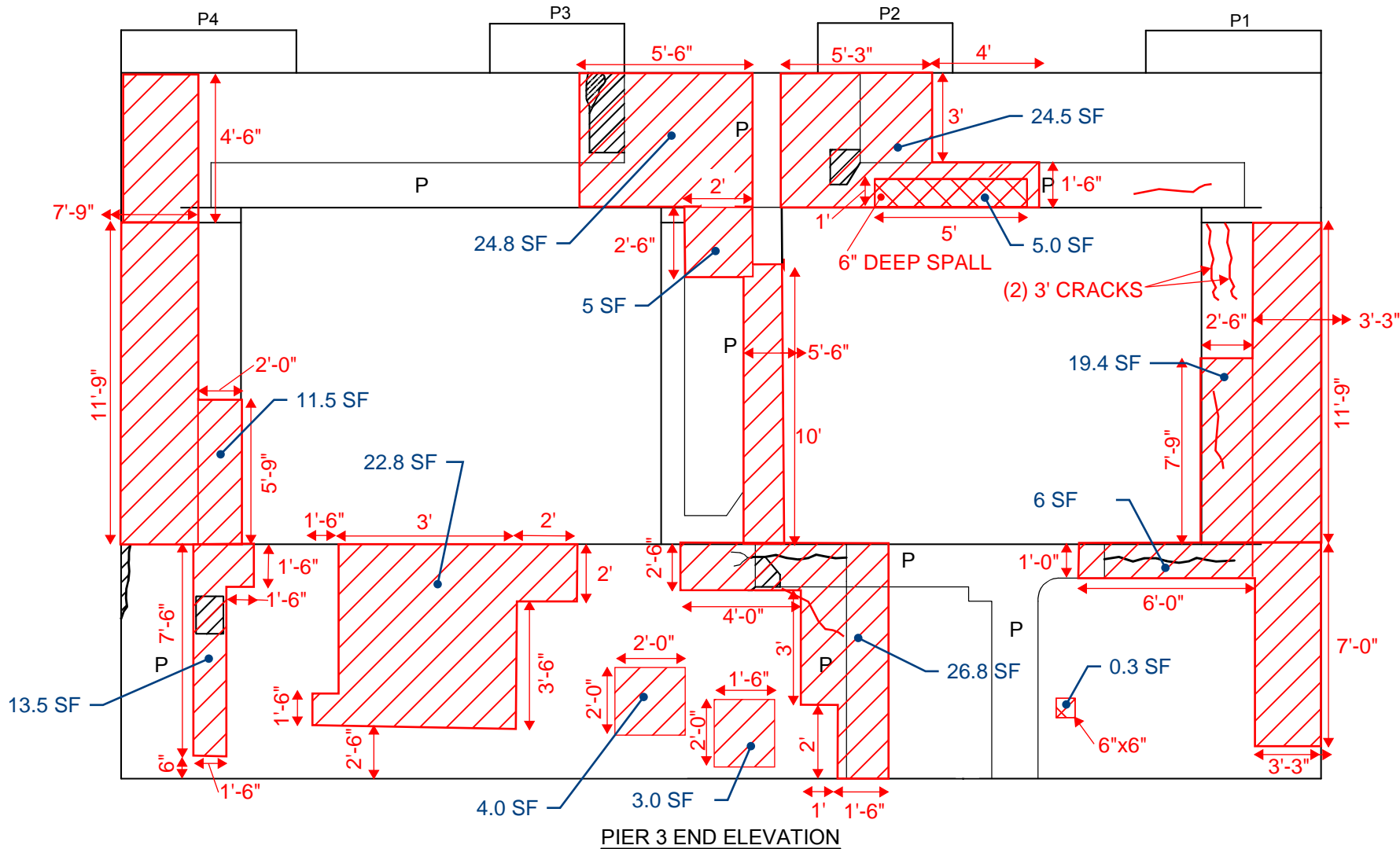
TOTAL LENGTH OF CRACKS: **6.0 LF**

PIER 3 DETERIORATION SKETCH

NOT TO SCALE



* NOTE: P1 LT & P4 RT VIEWS LOCATED ON
PIER 3 DETERIORATION SKETCH
SHEET 1 OF 2



PIER 3 END ELEVATION

QUANTITIES:
SPALL AREAS: **5.3 SF**
HOLLOW AREAS: 34.9 SF + 24.8 SF + 24.5 SF + 11.5 SF + 5 SF + 19.4 SF + 13.5 SF + 22.8 SF + 4.0 SF + 3.0 SF + 26.8 SF + 6 SF = **196.2 SF**
MAP CRACKED AREAS: **0.0 SF**
TOTAL LENGTH OF CRACKS: **10.0 LF**

LEGEND

Hollow Concrete (HC)

Spall (S)

Patch/Repair

Crack (C)

Hairline Crack (HL)

Core Location

LEGEND

Hollow Concrete (HC)

Spall (S)

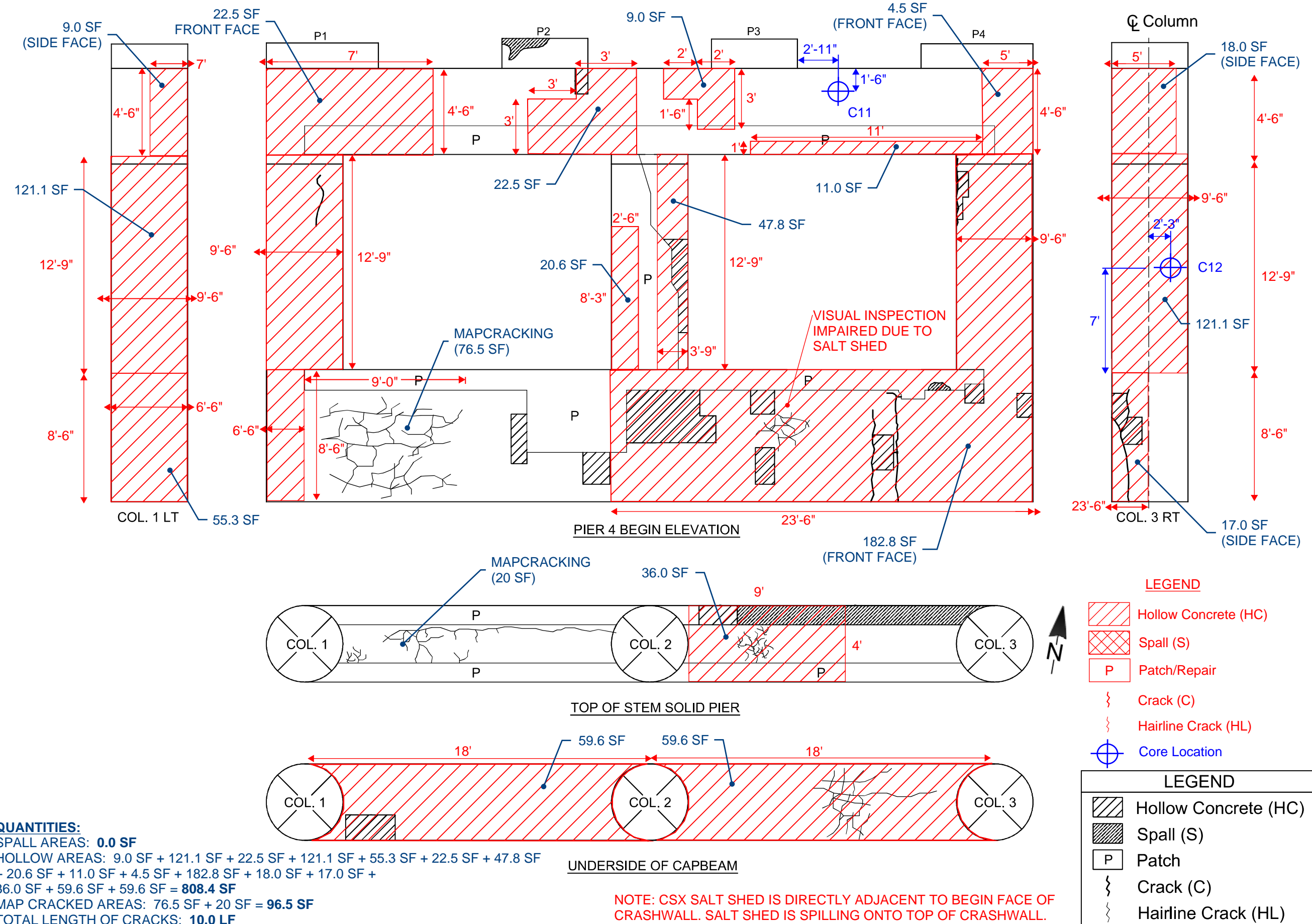
Patch

Crack (C)

Hairline Crack (HL)

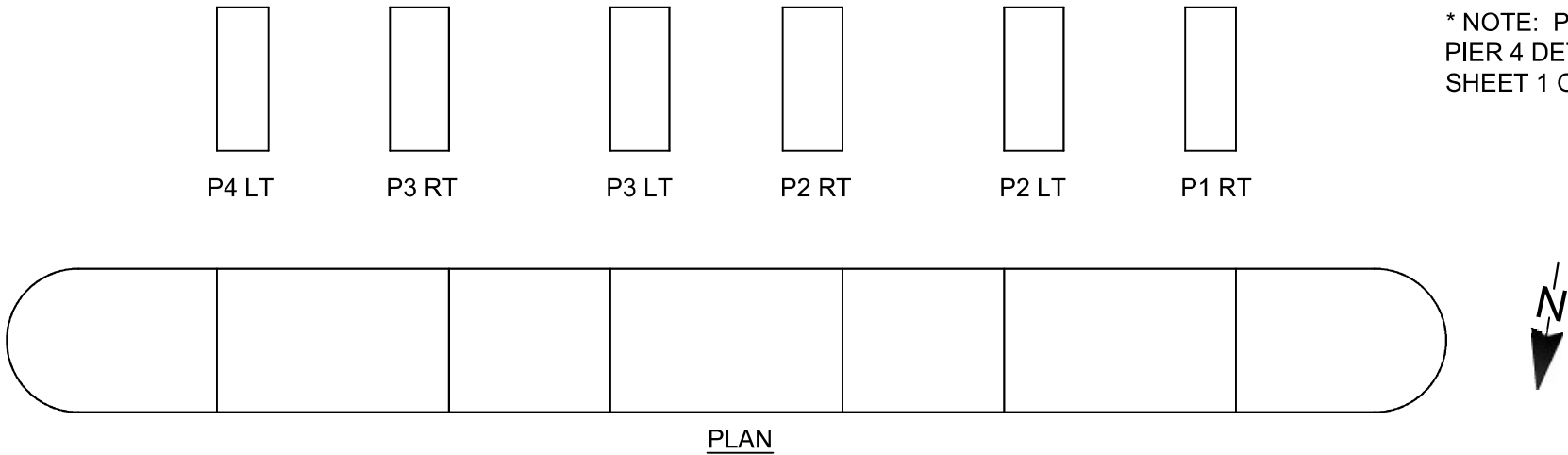
PIER 4 DETERIORATION SKETCH

NOT TO SCALE

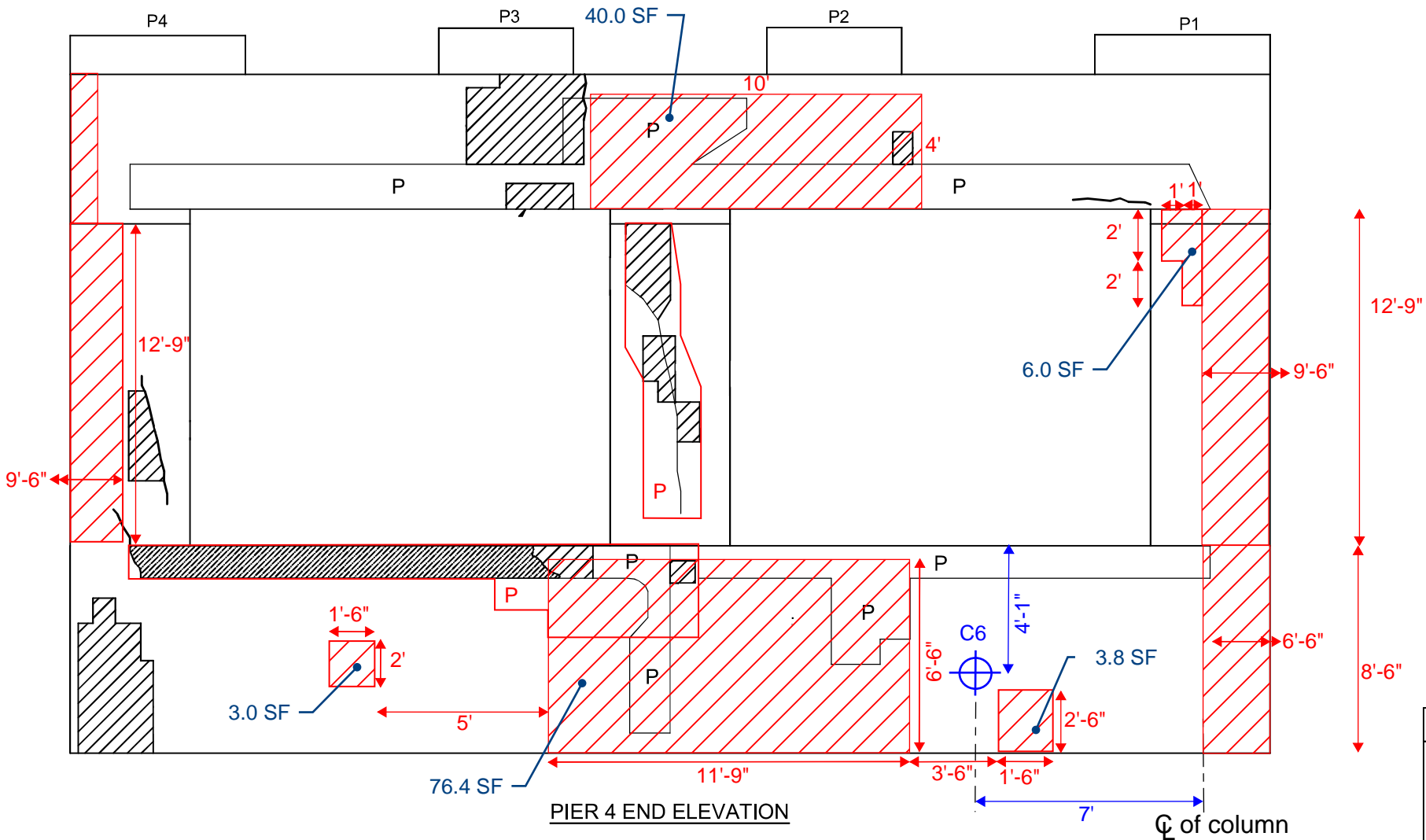


PIER 4 DETERIORATION SKETCH

NOT TO SCALE



* NOTE: P1 LT & P4 RT VIEWS LOCATED ON
PIER 4 DETERIORATION SKETCH
SHEET 1 OF 2



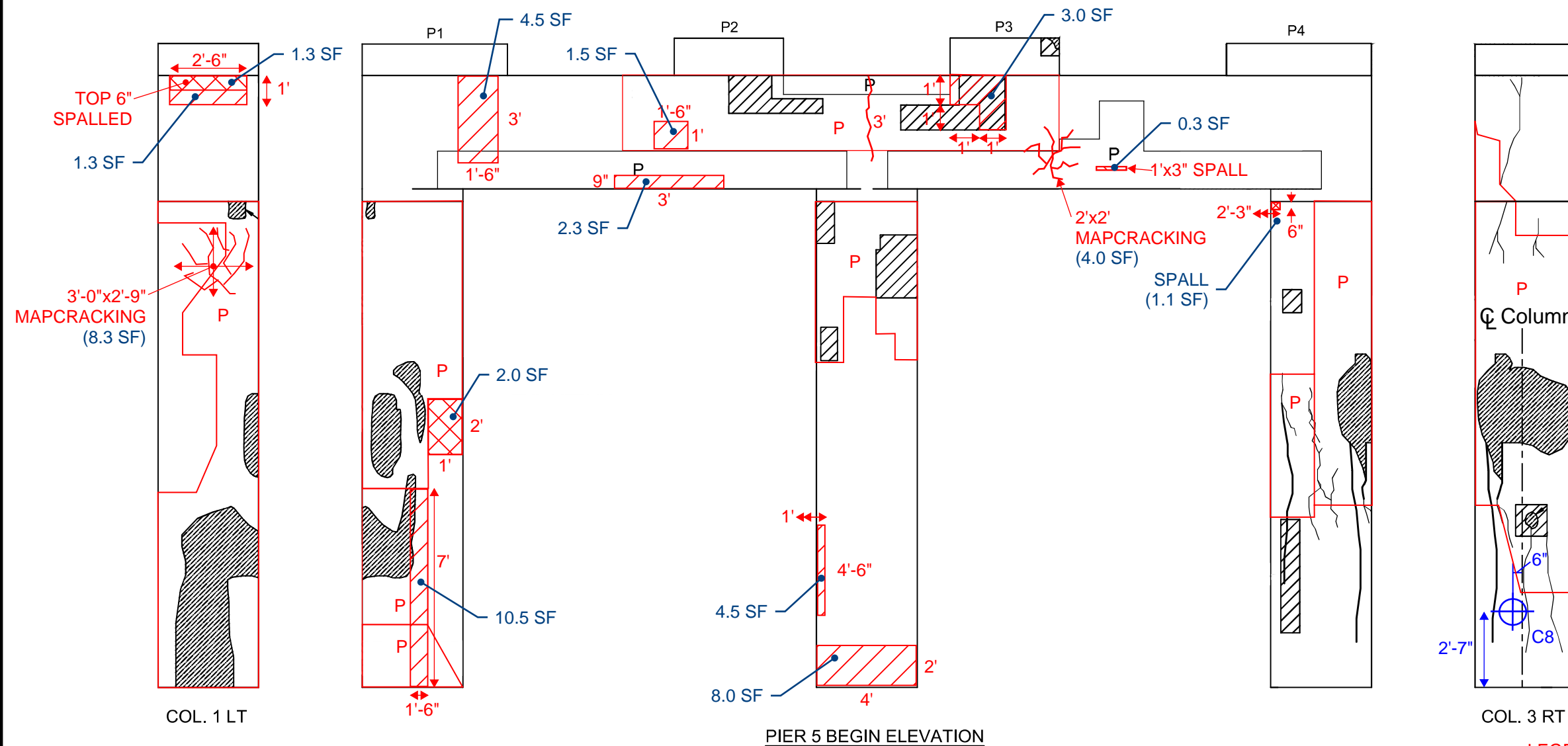
LEGEND

- Hollow Concrete (HC)
- Spall (S)
- Patch/Repair
- Crack (C)
- Hairline Crack (HL)
- Core Location







LEGEND

- Hollow Concrete (HC)
- Spall (S)
- Patch
- Crack (C)
- Hairline Crack (HL)

QUANTITIES:
SPALL AREAS: 0.0 SF
HOLLOW AREAS: 40.0 SF + 3.0 SF + 76.4 SF + 6.0 SF + 3.8 SF = 129.2 SF
MAP CRACKED AREAS: 0.0 SF
TOTAL LENGTH OF CRACKS: 0.0 LF



LEGEND

- | | |
|---------------------------------------------------------------------------------------|----------------------|
|  | Hollow Concrete (HC) |
|  | Spall (S) |
|  | Patch/Repair |
|  | Crack (C) |
|  | Hairline Crack (HL) |
|  | Core Location |

LEGEND

- | | |
|--|----------------------|
| | Hollow Concrete (HC) |
| | Spall (S) |
| | Patch |
| | Crack (C) |
| | Hairline Crack (HL) |

QUANTITIES:

SPALL AREAS: 1.3 SF + 1.1 SF + 0.3 SF + 2.0 SF = **4.7 SF**

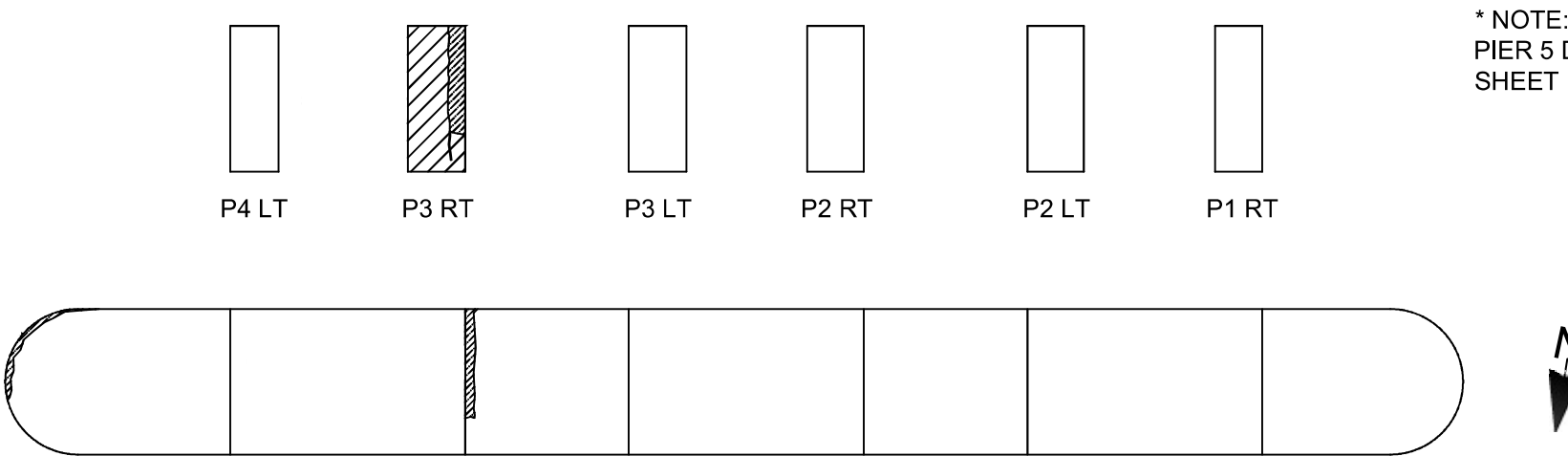
HOLLOW AREAS: 1.3 SF + 4.5 SF + 1.5 SF + 2.3 SF + 3.0 SF + 10.5 SF + 4.5 SF + 8.0 SF + 27.0 SF + 3.8 SF = **66.4 SF**

MAP CRACKED AREAS: 8.3 SF + 4.0 SF = **12.3 SF**

TOTAL LENGTH OF CRACKS: **8.0 LF**

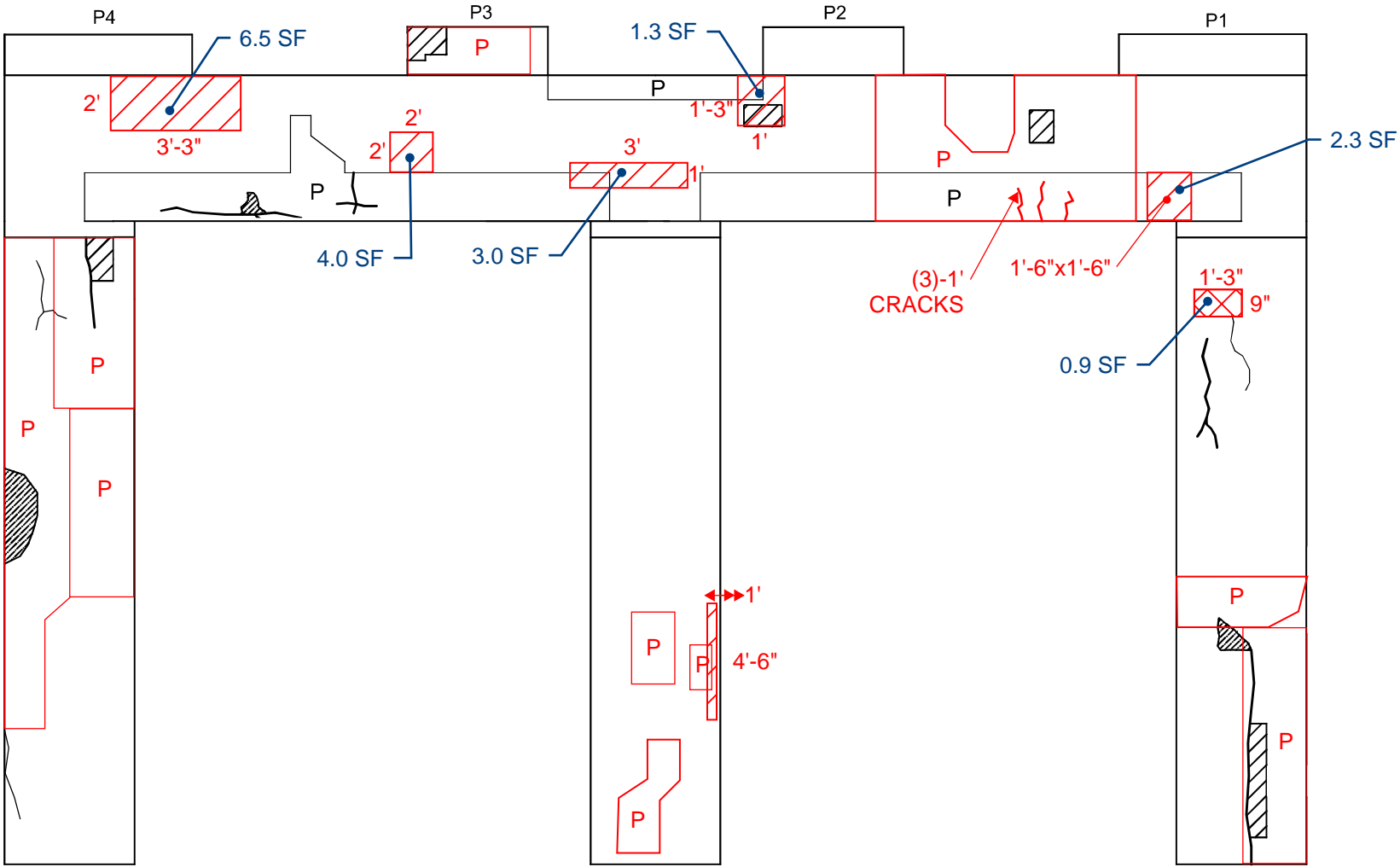
PIER 5 DETERIORATION SKETCH

NOT TO SCALE



* NOTE: P1 LT & P4 RT VIEWS LOCATED ON
PIER 5 DETERIORATION SKETCH
SHEET 1 OF 2

PLAN



PIER 5 END ELEVATION

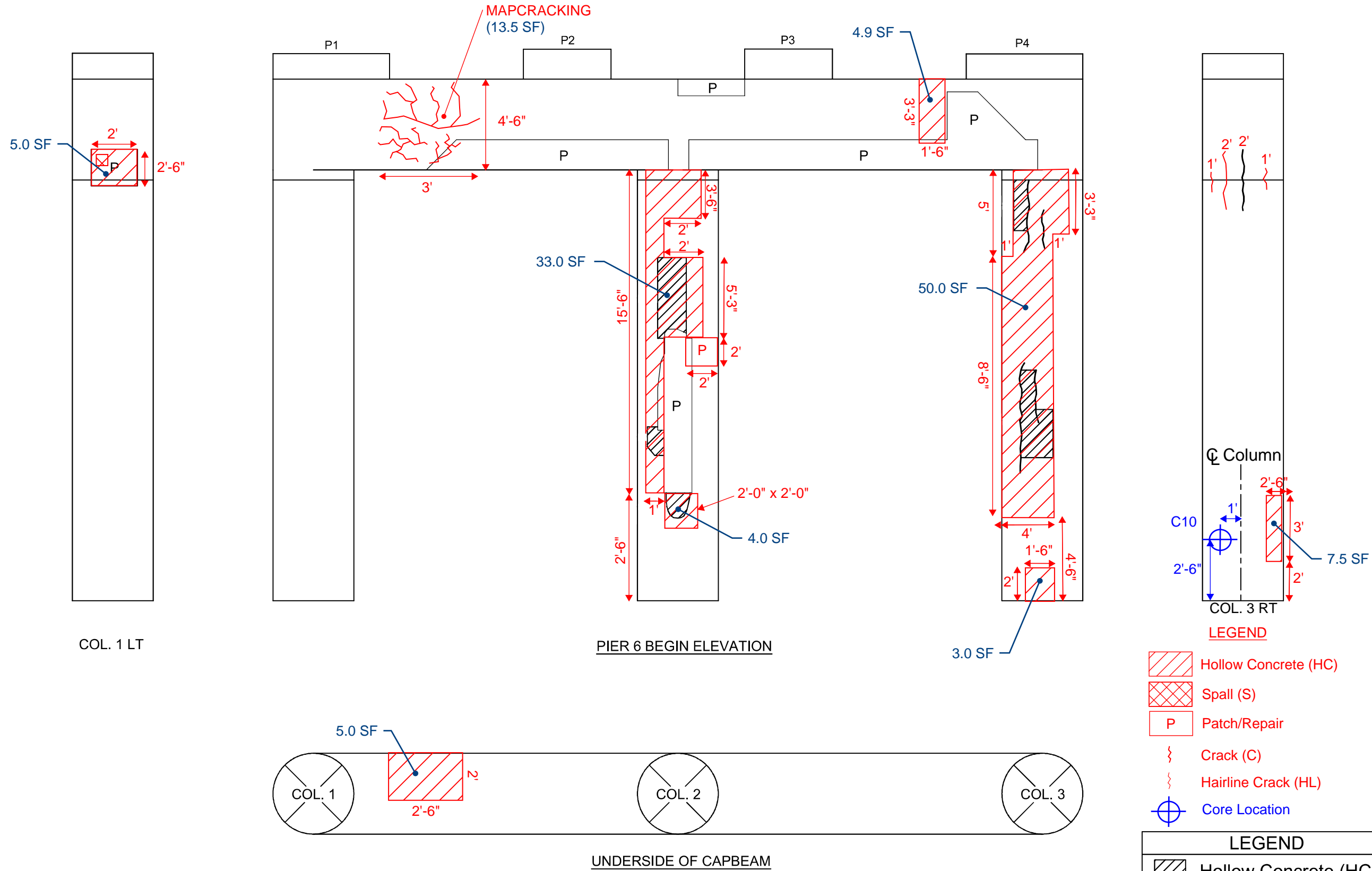
QUANTITIES:
SPALL AREAS: **0.9 SF**
HOLLOW AREAS: 6.5 SF + 4.0 SF + 3.0 SF + 1.3 SF + 2.3 SF =**17.1 SF**
MAP CRACKED AREAS: **0.0 SF**
TOTAL LENGTH OF CRACKS: **10.0 LF**

LEGEND	
	Hollow Concrete (HC)
	Spall (S)
	Patch/Repair
	Crack (C)
	Hairline Crack (HL)
	Core Location

LEGEND	
	Hollow Concrete (HC)
	Spall (S)
	Patch
	Crack (C)
	Hairline Crack (HL)

PIER 6 DETERIORATION SKETCH

NOT TO SCALE

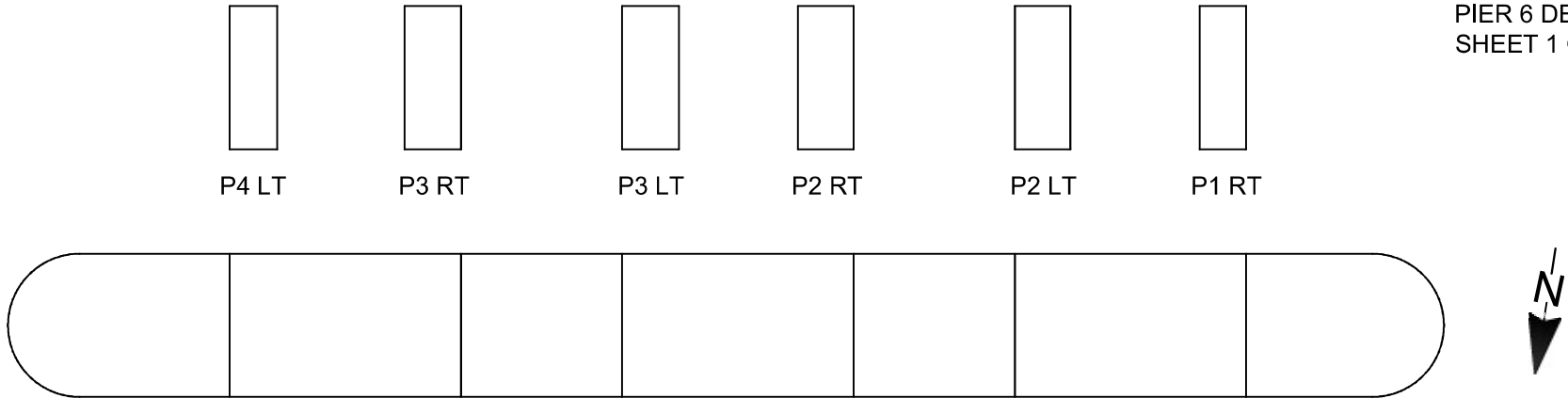


QUANTITIES:
SPALL AREAS: **0.0 SF**
HOLLOW AREAS: 5.0 SF + 4.9 SF + 33.0 SF + 4.0 SF + 50.0 SF + 3.0 SF + 7.5 SF + 5.0 SF = **112.4 SF**
MAP CRACKED AREAS: **13.5 SF**
TOTAL LENGTH OF CRACKS: **6.0 LF**

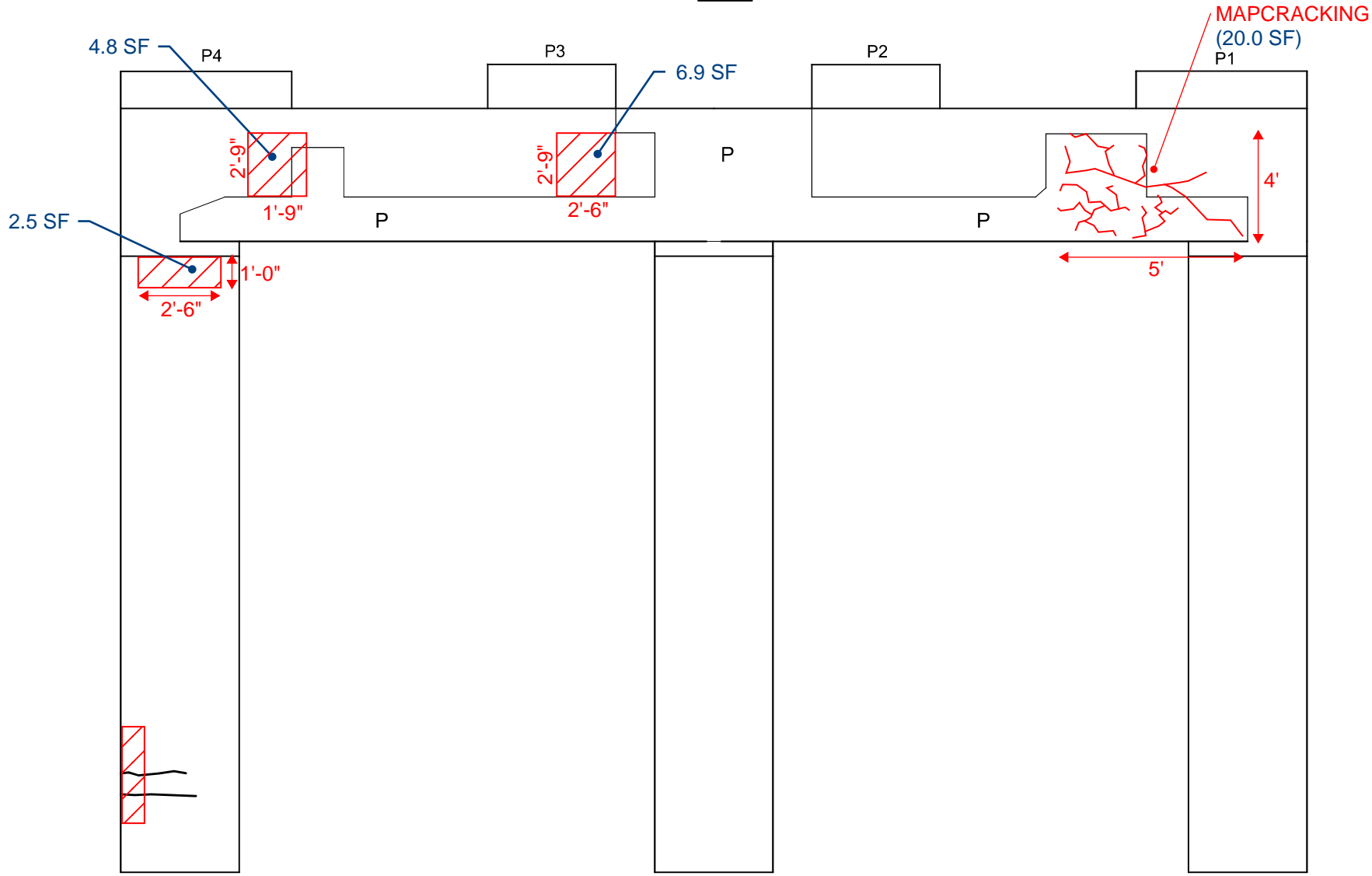
PIER 6 DETERIORATION SKETCH

NOT TO SCALE

* NOTE: P1 LT & P4 RT VIEWS LOCATED ON
PIER 6 DETERIORATION SKETCH
SHEET 1 OF 2



PLAN



PIER 6 END ELEVATION

QUANTITIES:
SPALL AREAS: **0.0 SF**
HOLLOW AREAS: 2.5 SF + 4.8 SF + 6.9 SF = **14.2 SF**
MAP CRACKED AREAS: **20.0 SF**
TOTAL LENGTH OF CRACKS: **4 LF**

LEGEND

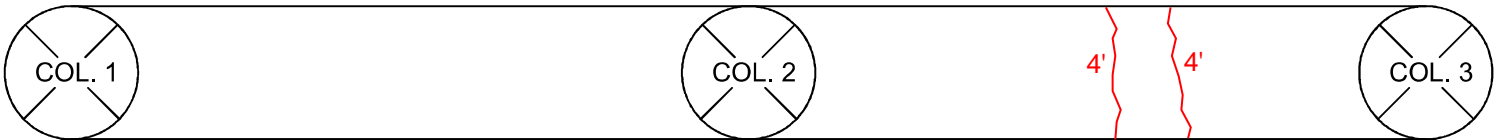
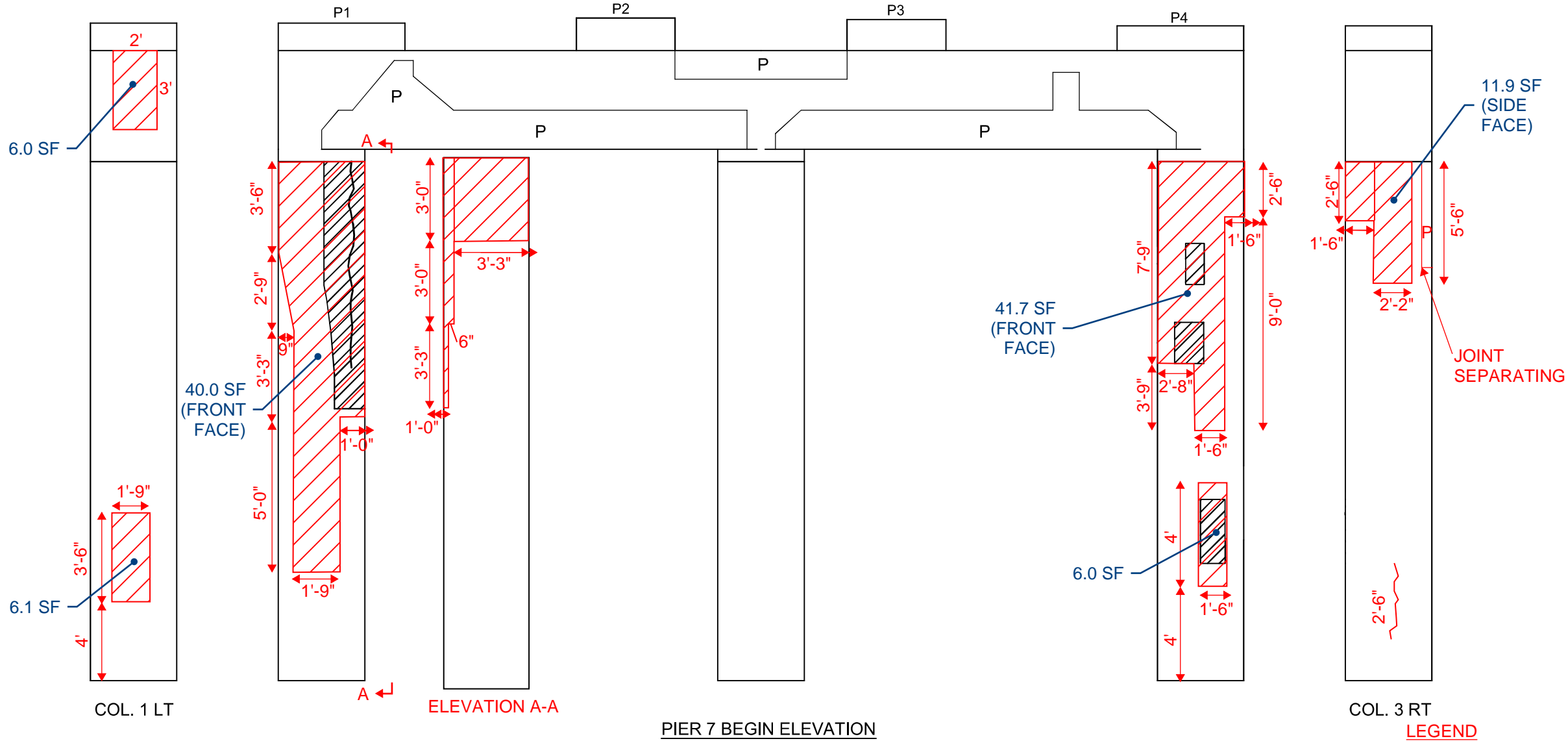
	Hollow Concrete (HC)
	Spall (S)
	Patch/Repair
	Crack (C)
	Hairline Crack (HL)
	Core Location

LEGEND

	Hollow Concrete (HC)
	Spall (S)
	Patch
	Crack (C)
	Hairline Crack (HL)

PIER 7 DETERIORATION SKETCH

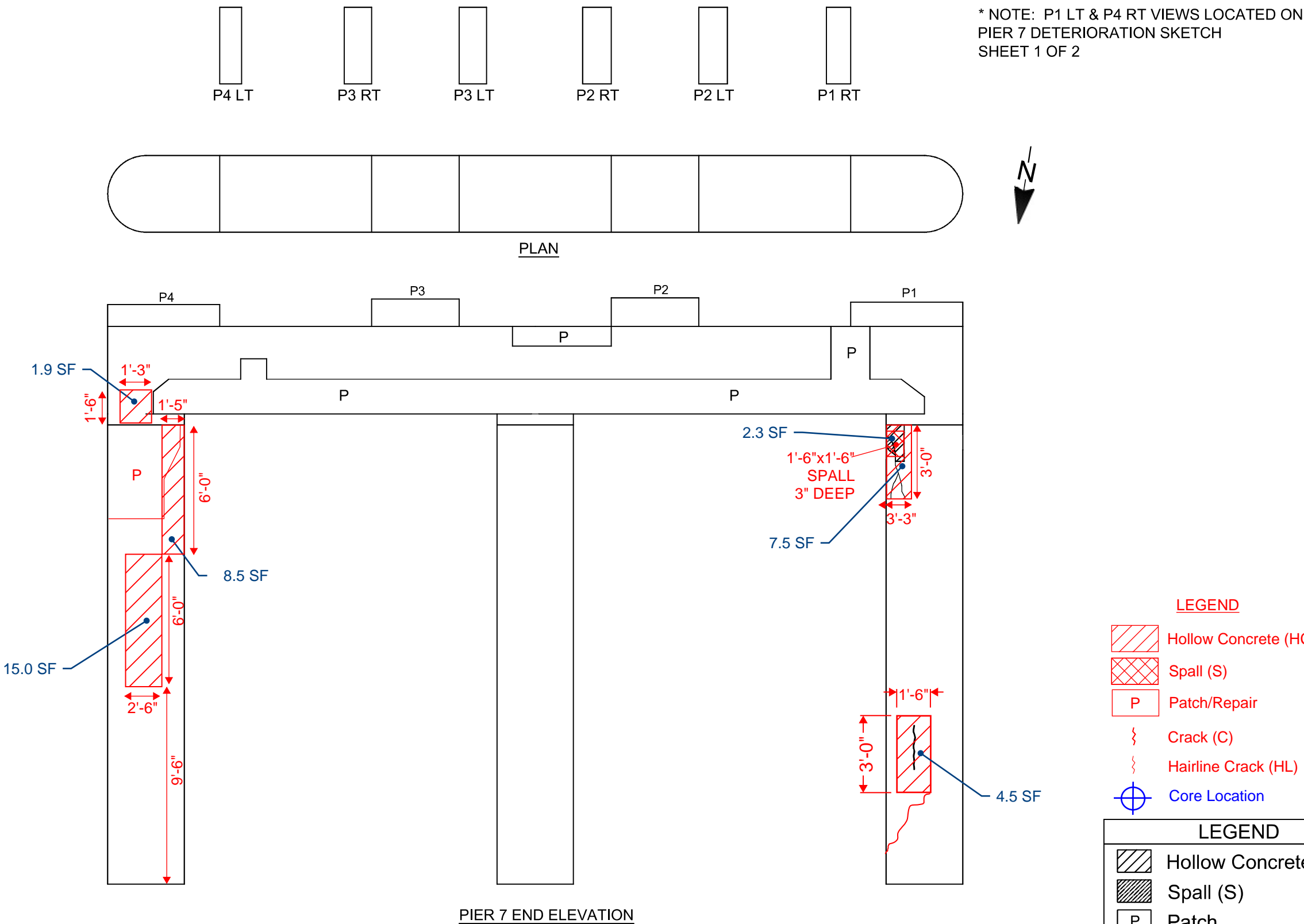
NOT TO SCALE



- LEGEND**
- Hollow Concrete (HC)
 - Spall (S)
 - Patch/Repair
 - Crack (C)
 - Hairline Crack (HL)
 - Core Location

- LEGEND**
- Hollow Concrete (HC)
 - Spall (S)
 - Patch
 - Crack (C)
 - Hairline Crack (HL)

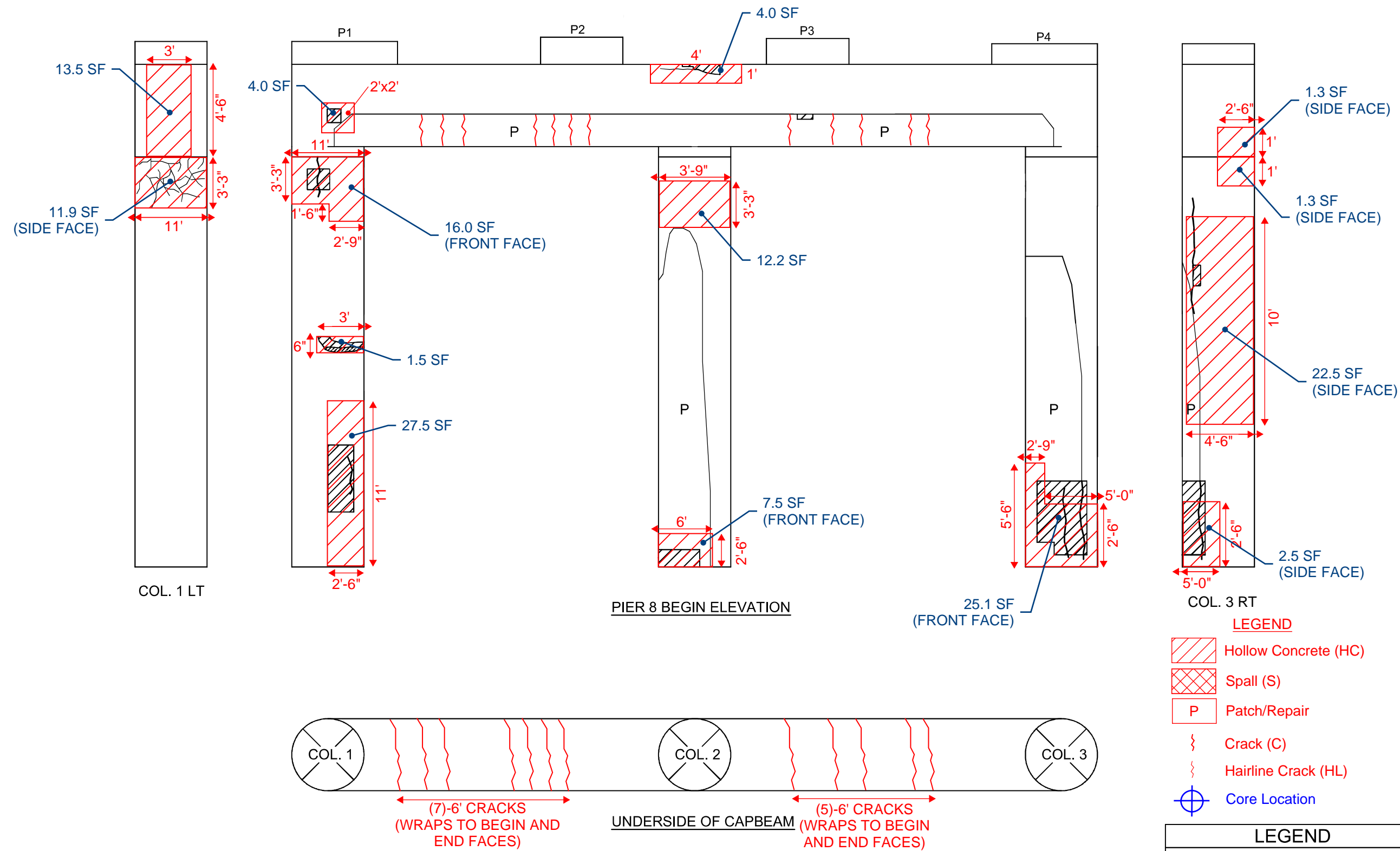
QUANTITIES:
SPALL AREAS: **0.0 SF**
HOLLOW AREAS: 6.0 SF + 6.1 SF + 40.0 SF + 9.52 SF + 11.9 SF + 41.7 SF + 6.0 SF = **111.7 SF**
MAP CRACKED AREAS: **0.0 SF**
TOTAL LENGTH OF CRACKS: **10.5 LF**



QUANTITIES:
SPALL AREAS: 2.3 SF
HOLLOW AREAS: 1.9 SF + 8.5 SF + 15.0 SF + 7.5 SF + 4.5 SF = 37.4 SF
MAP CRACKED AREAS: 0.0 SF
TOTAL LENGTH OF CRACKS: 4.0 LF

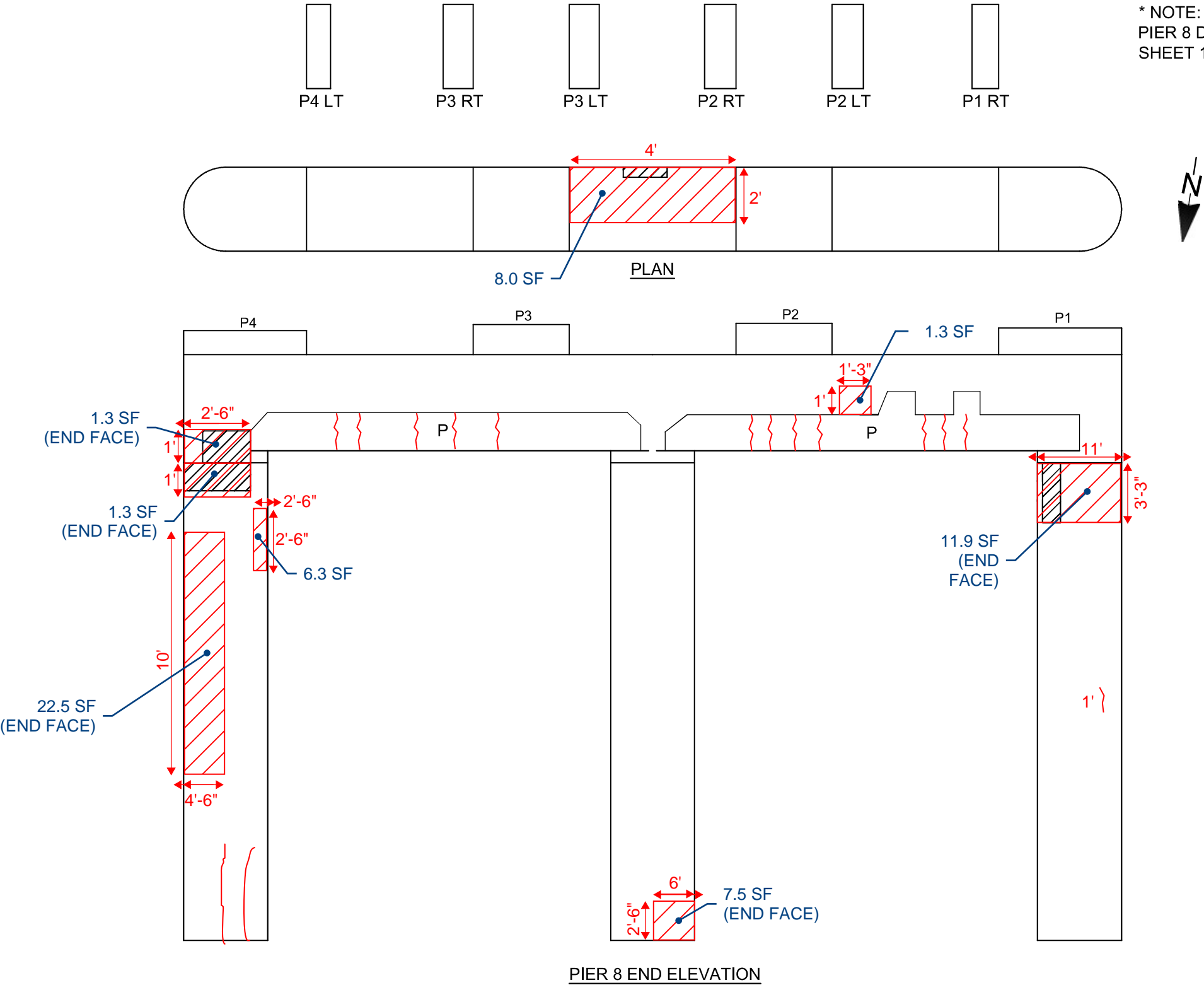
PIER 8 DETERIORATION SKETCH

NOT TO SCALE



QUANTITIES:
SPALL AREAS: 0.0 SF
HOLLOW AREAS: 13.5 SF + 11.9 SF + 4.0 SF + 16.0 SF + 1.5 SF + 27.5 SF + 4.0 SF + 12.2 SF + 7.5 SF + 25.1 SF + 2.5 SF + 22.5 SF + 1.3 SF + 1.3 SF = 150.8 SF
MAP CRACKED AREAS: 0.0 SF
TOTAL LENGTH OF CRACKS: 78.0 LF

LEGEND	
	Hollow Concrete (HC)
	Spall (S)
	Patch
	Crack (C)
	Hairline Crack (HL)



* NOTE: P1 LT & P4 RT VIEWS LOCATED ON
PIER 8 DETERIORATION SKETCH
SHEET 1 OF 2

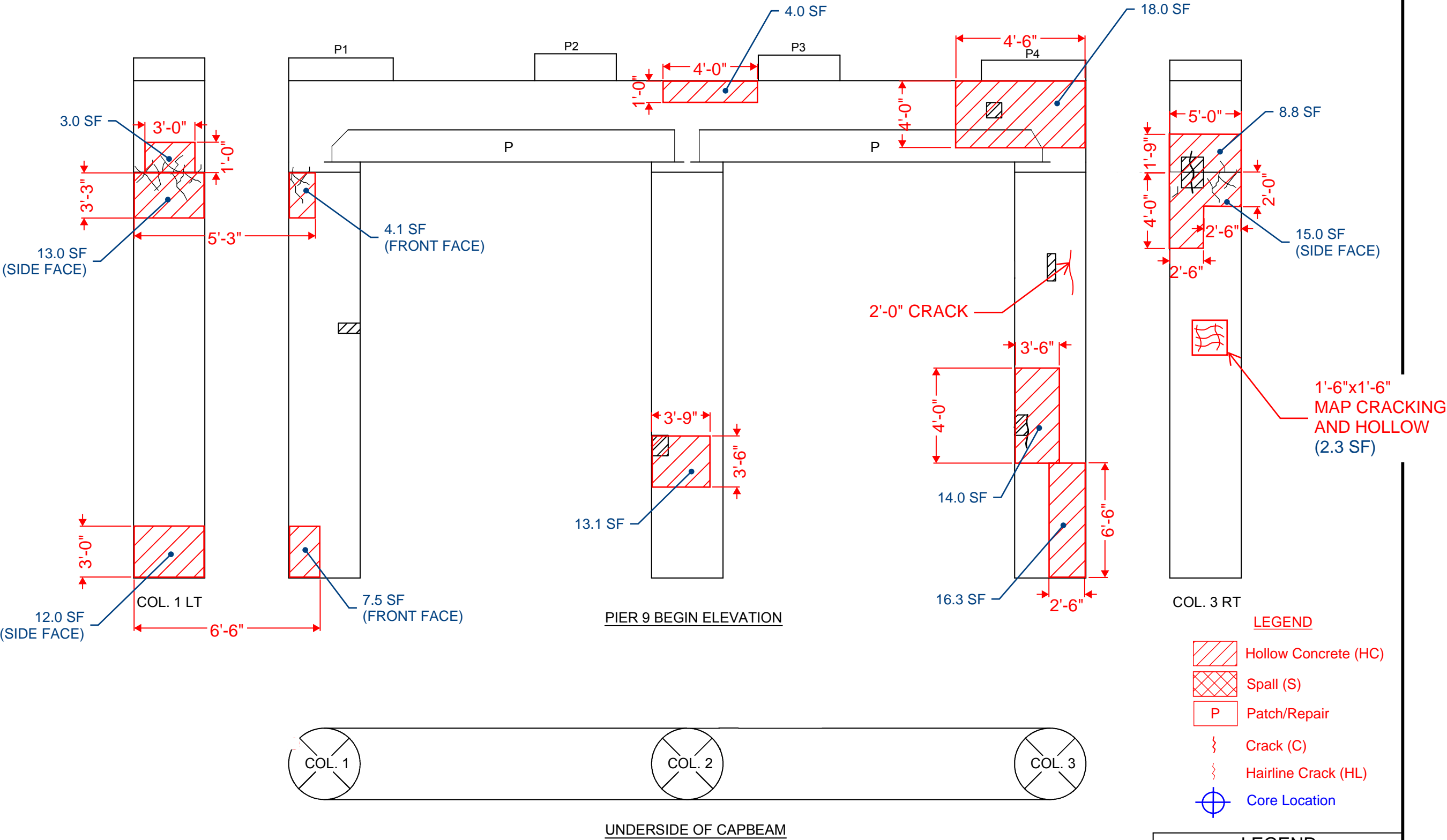
QUANTITIES:
SPALL AREAS: **0.0 SF**
HOLLOW AREAS: 8.0 SF + 1.3 SF + 1.3 SF + 6.3 SF + 22.5 SF + 1.3 SF + 11.9 SF + 7.5 SF = **60.1 SF**
MAP CRACKED AREAS: **0.0 SF**
TOTAL LENGTH OF CRACKS: **13.0 LF**

LEGEND	
	Hollow Concrete (HC)
	Spall (S)
	Patch/Repair
	Crack (C)
	Hairline Crack (HL)
	Core Location

LEGEND	
	Hollow Concrete (HC)
	Spall (S)
	Patch
	Crack (C)
	Hairline Crack (HL)

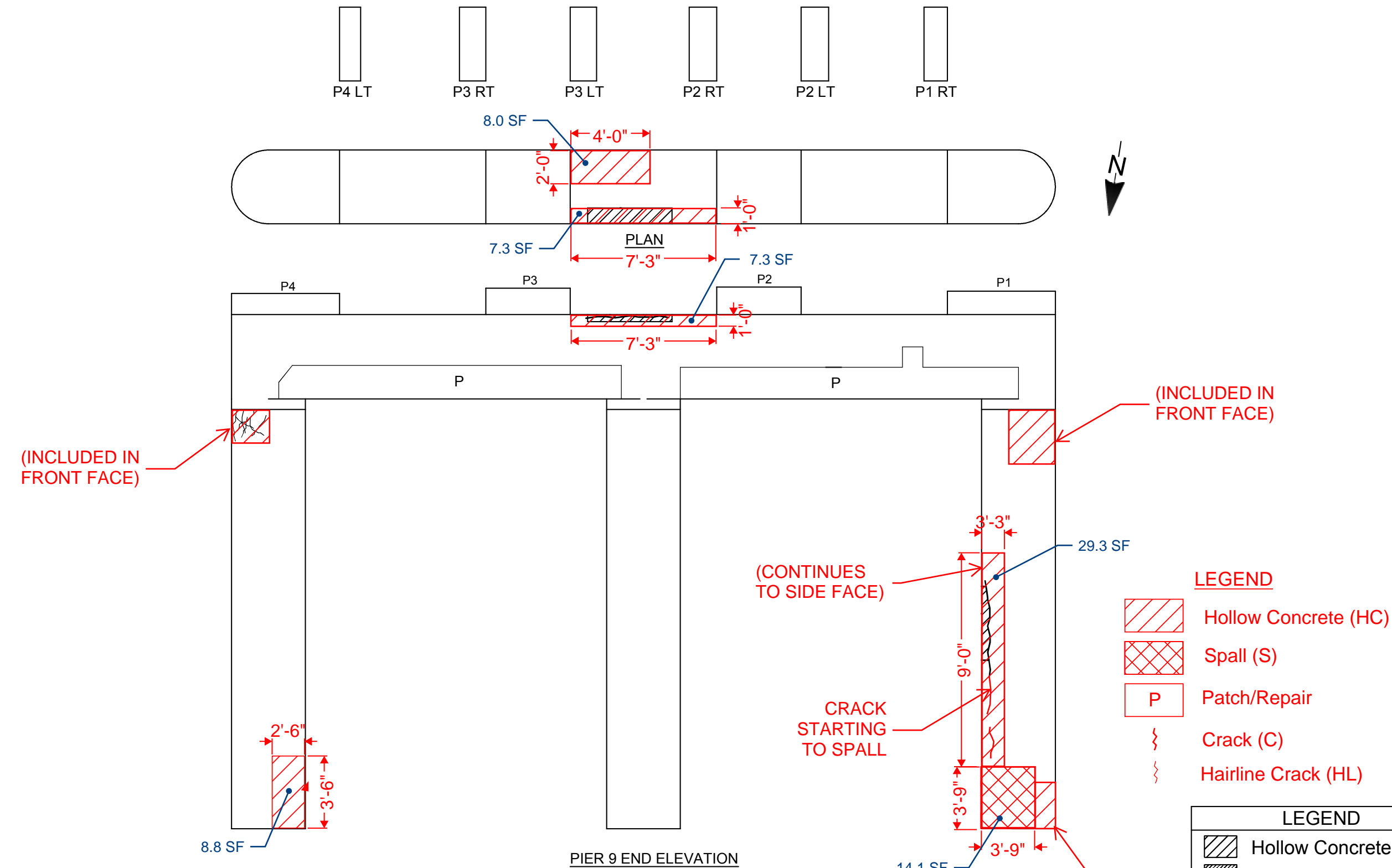
PIER 9 DETERIORATION SKETCH

NOT TO SCALE



QUANTITIES:
SPALL AREAS: **0.0 SF**
HOLLOW AREAS: 3.0 SF + 13.0 SF + 4.1 SF + 12.0 SF + 7.5 SF + 4.0 SF + 13.1 SF + 18.0 SF + 8.8 SF + 15.0 SF + 14.0 SF + 16.3 SF = **128.8 SF**
MAP CRACKED AREAS: **2.3 SF**
TOTAL LENGTH OF CRACKS: **2.0 LF**

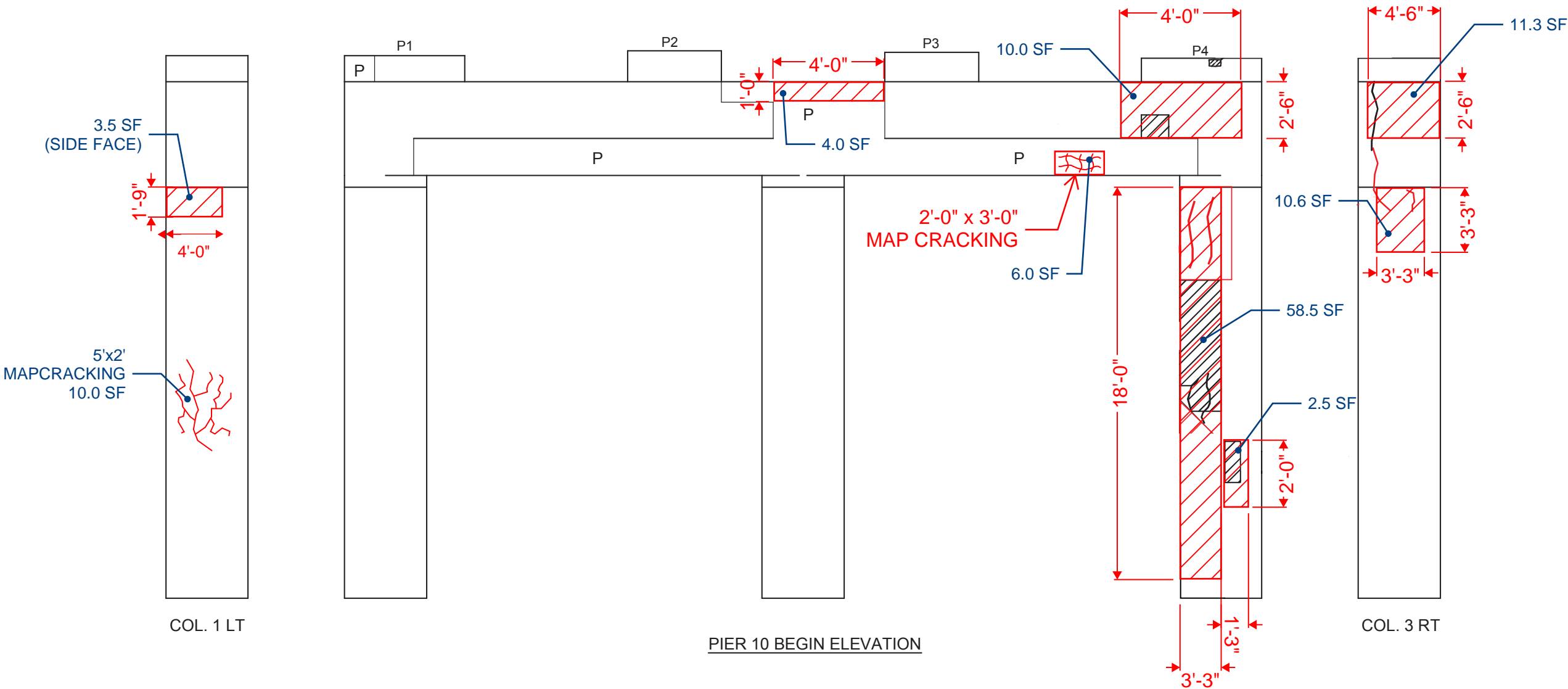
LEGEND	
	Hollow Concrete (HC)
	Spall (S)
	Patch
	Crack (C)
	Hairline Crack (HL)



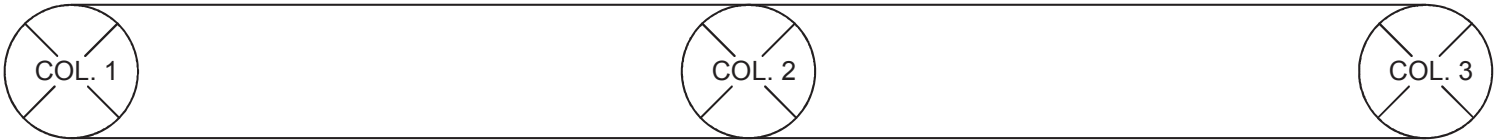
QUANTITIES:
SPALL AREAS: 14.1 SF
HOLLOW AREAS: 8.8 SF + 8.0 SF + 7.3 SF + 7.3 SF + 29.3 SF = 60.7 SF
MAP CRACKED AREAS: 0.0 SF
TOTAL LENGTH OF CRACKS: 0.0 LF

PIER 10 DETERIORATION SKETCH

NOT TO SCALE



PIER 10 BEGIN ELEVATION



UNDERSIDE OF CAPBEAM

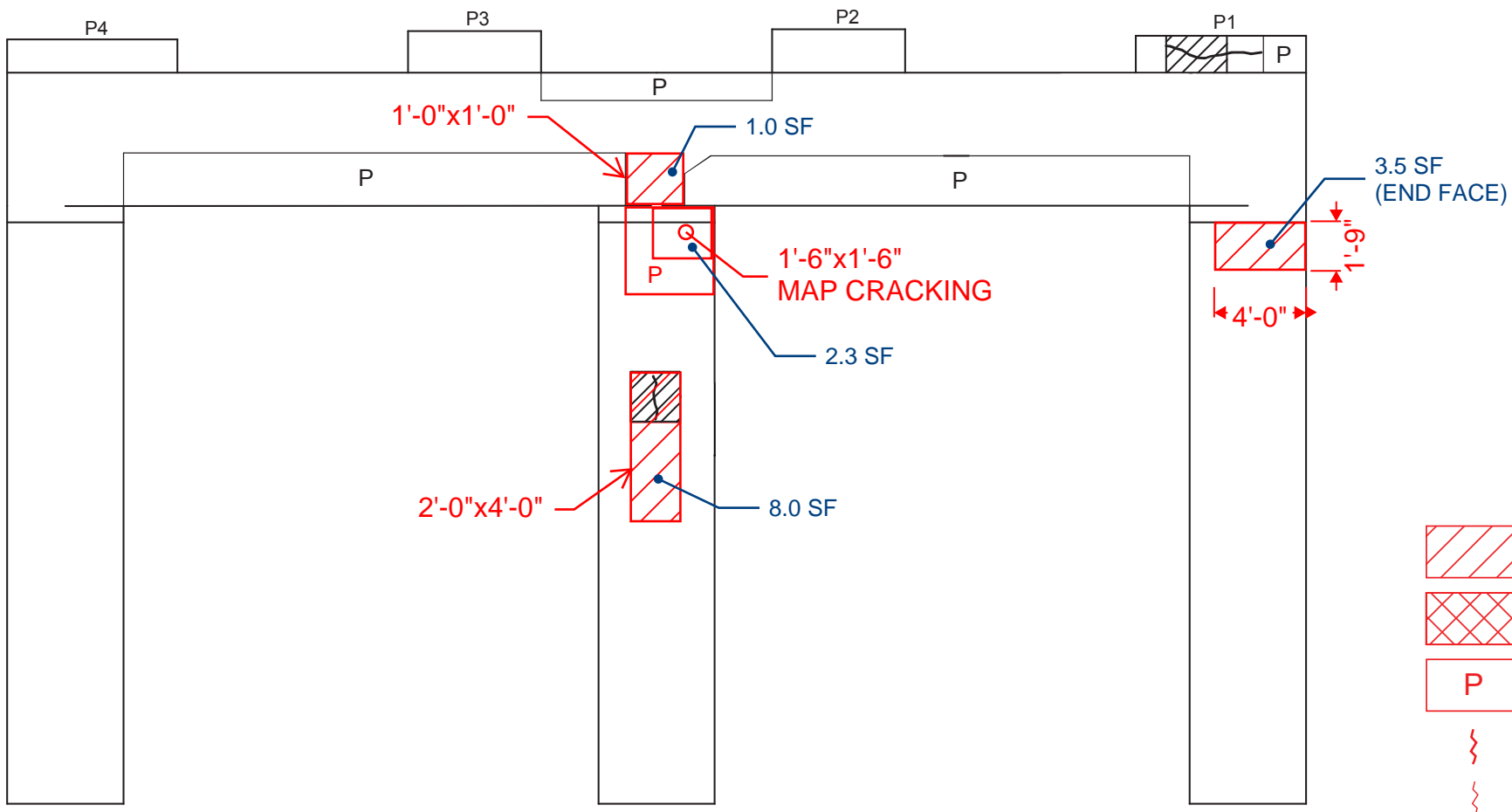
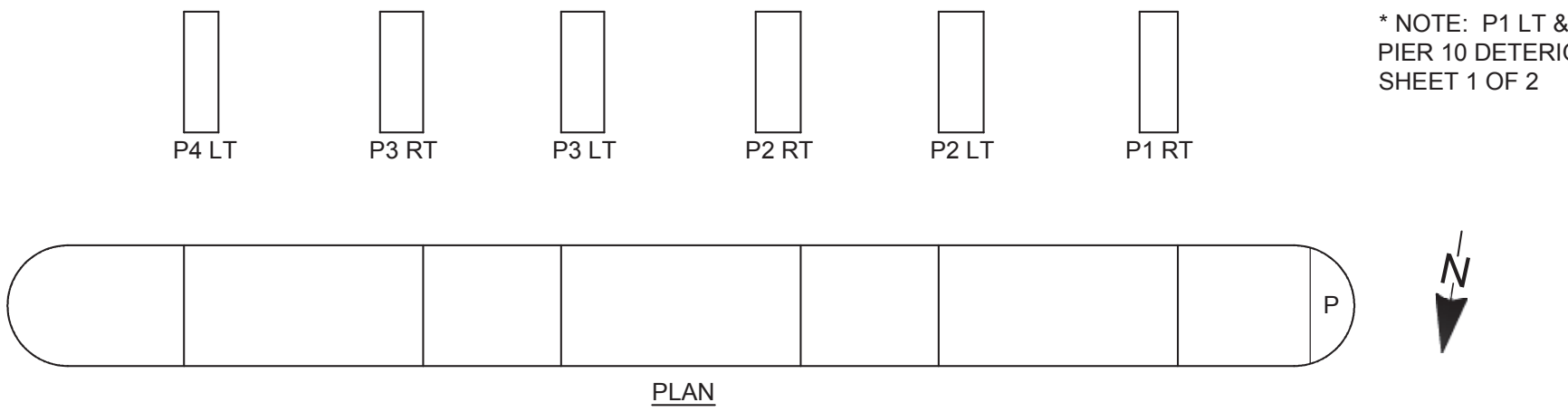
QUANTITIES:
SPALL AREAS: **0.0 SF**
HOLLOW AREAS: 3.5 SF + 4.0 SF + 10.0 SF + 58.5 SF + 2.5 SF + 10.6 SF + 11.3 SF = **100.4 SF**
MAP CRACKED AREAS: 10.0 SF + 6.0 SF = **16.0 SF**
TOTAL LENGTH OF CRACKS: **2.0 LF**

LEGEND

- Hollow Concrete (HC)
- Spall (S)
- Patch/Repair
- Crack (C)
- Hairline Crack (HL)

LEGEND

- Hollow Concrete (HC)
- Spall (S)
- Patch
- Crack (C)
- Hairline Crack (HL)



PIER 10 END ELEVATION

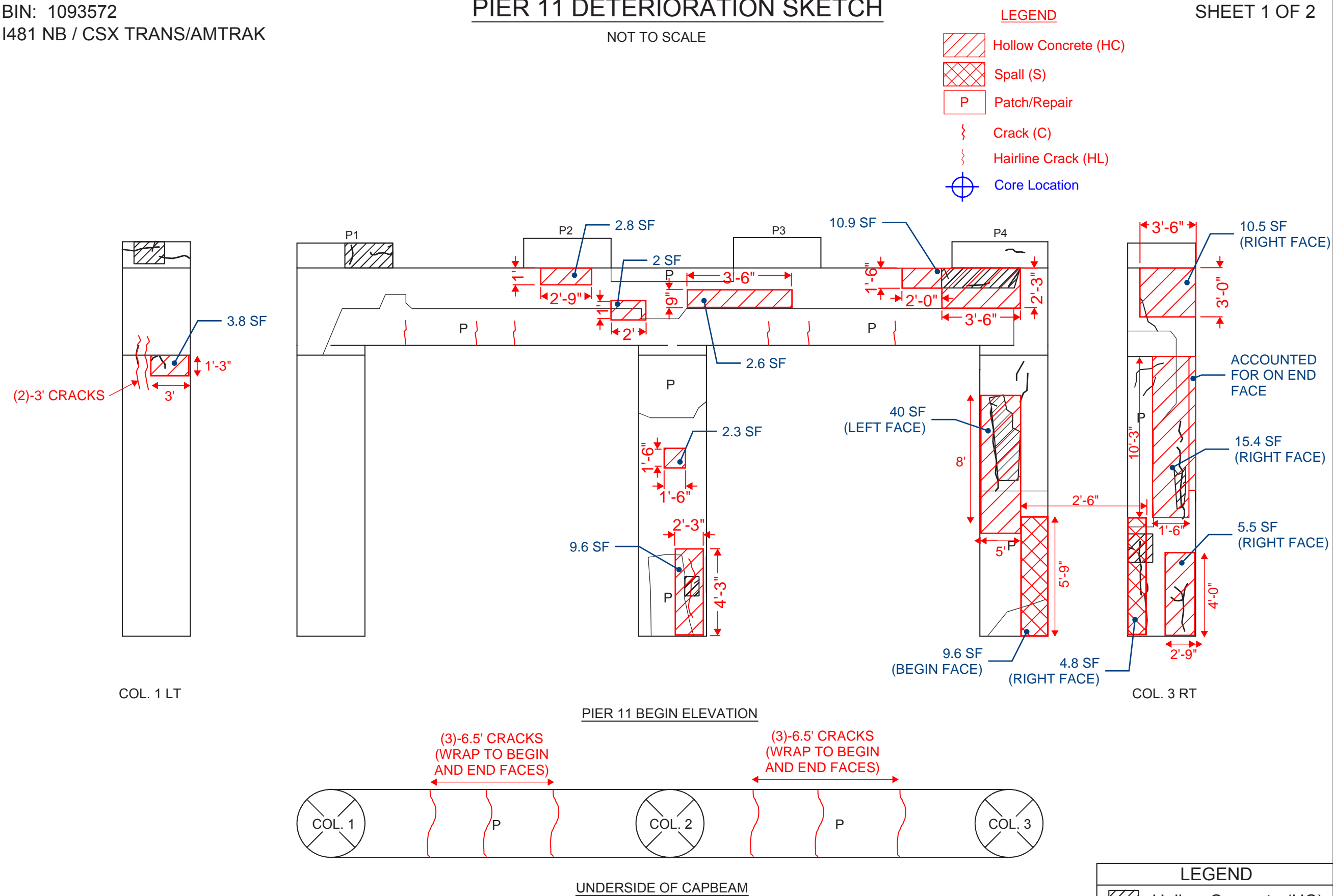
QUANTITIES:
SPALL AREAS: **0.0 SF**
HOLLOW AREAS: 1.0 SF + 8.0 SF + 3.5 SF = **12.5 SF**
MAP CRACKED AREAS: **2.3 SF**
TOTAL LENGTH OF CRACKS: **0.0 LF**

LEGEND	
	Hollow Concrete (HC)
	Spall (S)
	Patch/Repair
	Crack (C)
	Hairline Crack (HL)

LEGEND	
	Hollow Concrete (HC)
	Spall (S)
	Patch
	Crack (C)
	Hairline Crack (HL)

PIER 11 DETERIORATION SKETCH

NOT TO SCALE



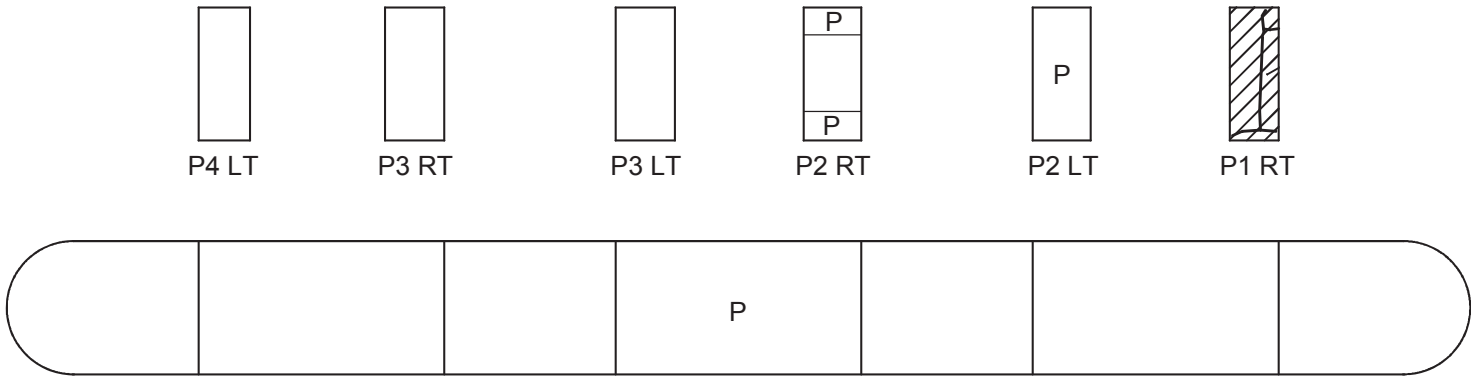
QUANTITIES:
SPALL AREAS: 9.6 SF + 4.8 SF = **14.4 SF**
HOLLOW AREAS: 3.8 SF + 2.8 SF + 2.0 SF + 2.6 SF + 10.9 SF + 10.5 SF + 15.4 SF + 5.5 SF + 40.0 SF + 9.6 SF + 2.3 SF = **105.4 SF**
MAP CRACKED AREAS: **0.0 SF**
TOTAL LENGTH OF CRACKS: **52 LF**

LEGEND	
	Hollow Concrete (HC)
	Spall (S)
	Patch
	Crack (C)
	Hairline Crack (HL)

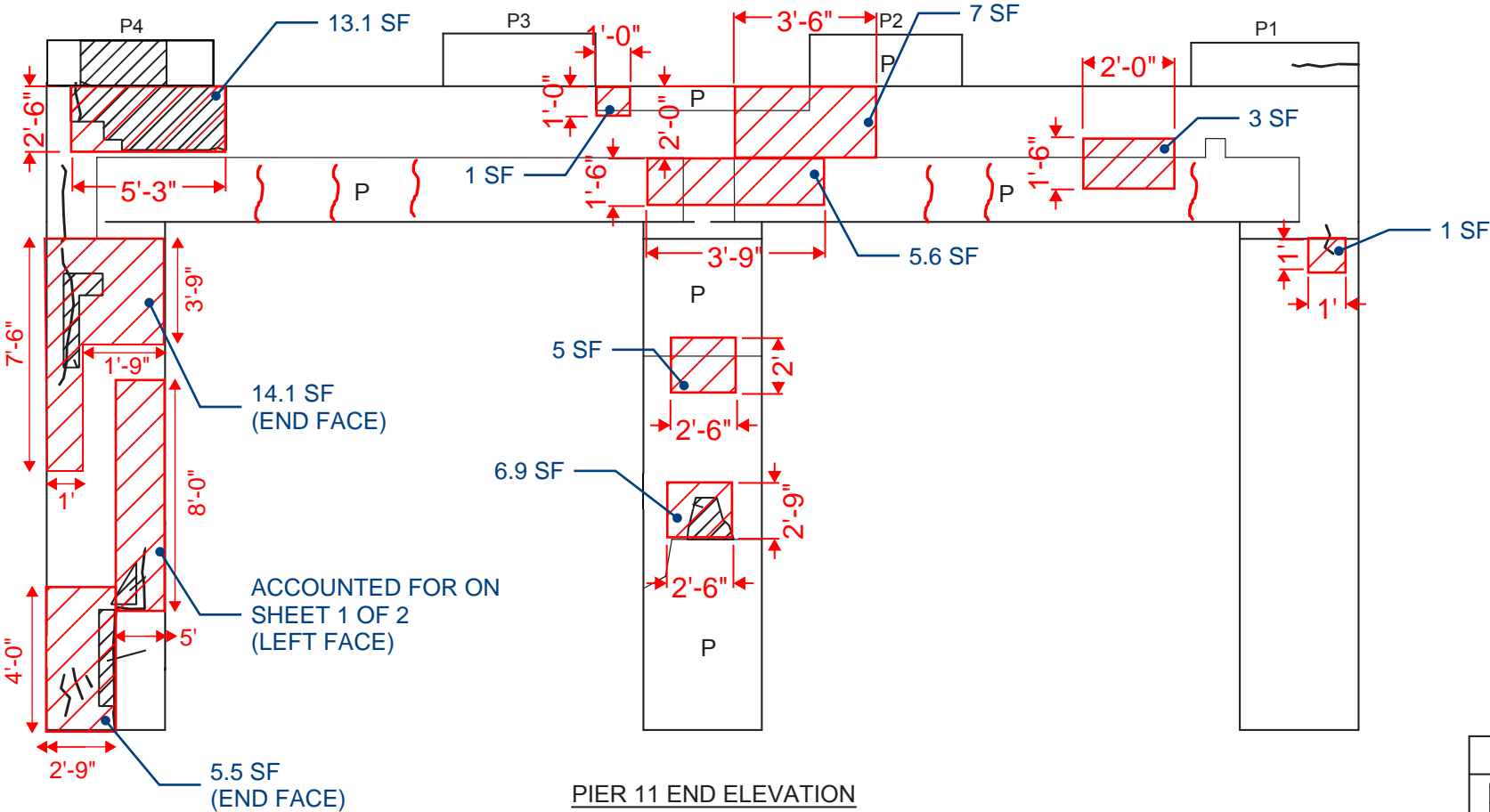
PIER 11 DETERIORATION SKETCH

NOT TO SCALE

* NOTE: P1 LT & P4 RT VIEWS LOCATED ON
PIER 11 DETERIORATION SKETCH
SHEET 1 OF 2



PLAN



PIER 11 END ELEVATION

LEGEND

- Hollow Concrete (HC)
- Spall (S)
- Patch/Repair
- Crack (C)
- Hairline Crack (HL)
- Core Location

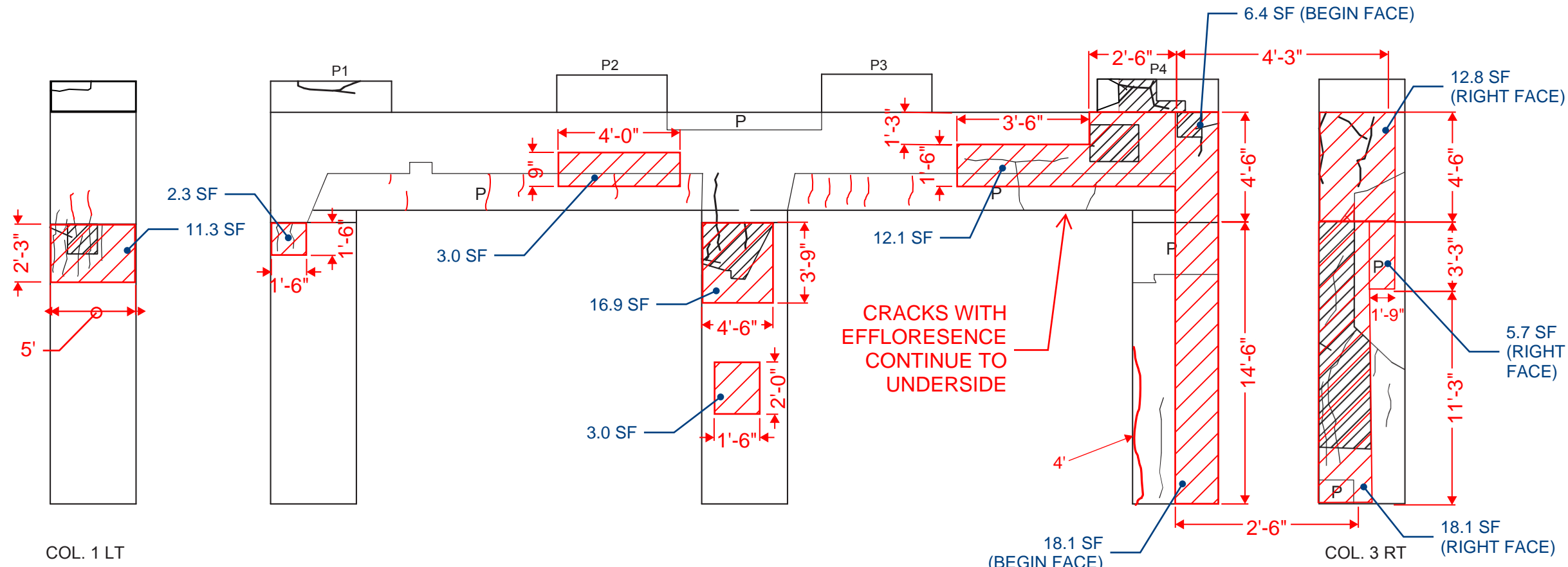
LEGEND

- Hollow Concrete (HC)
- Spall (S)
- Patch
- Crack (C)
- Hairline Crack (HL)

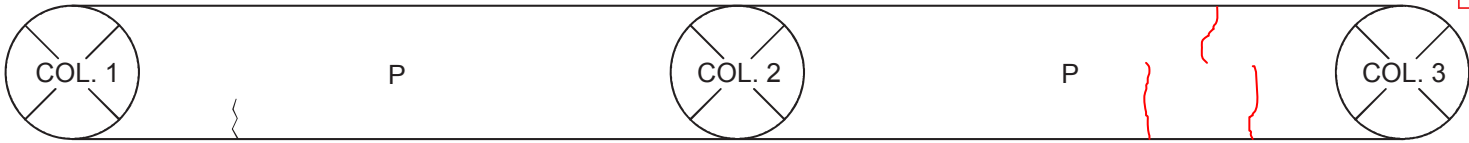
QUANTITIES:
SPALL AREAS: **0.0 SF**
HOLLOW AREAS: 13.1 SF + 1.0 SF + 7.0 SF + 5.6 SF + 3.0 SF + 1.0 SF + 5.0 SF + 6.9 SF + 14.1 SF + 5.5 SF = **62.2 SF**
MAP CRACKED AREAS: **0.0 SF**
TOTAL LENGTH OF CRACKS: **0.0 LF**

PIER 12 DETERIORATION SKETCH

NOT TO SCALE



PIER 12 BEGIN ELEVATION



UNDERSIDE OF CAPBEAM

CRACKS WITH EFFLORESCENCE

LEGEND

- Hollow Concrete (HC)
- Spall (S)
- Patch/Repair
- Crack (C)
- Hairline Crack (HL)

LEGEND

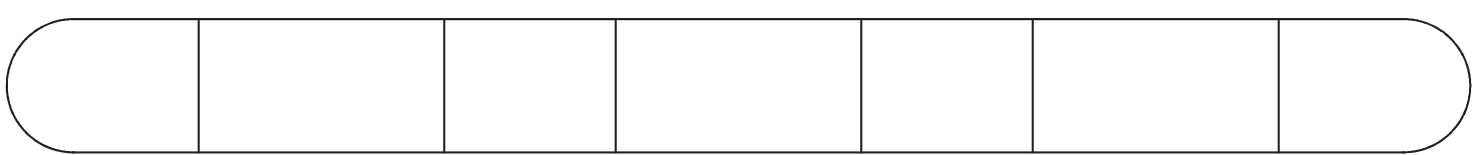
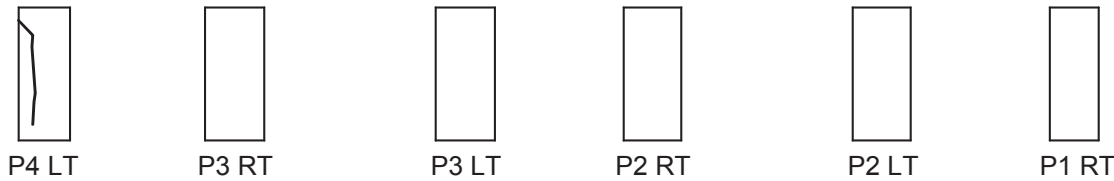
- Hollow Concrete (HC)
- Spall (S)
- Patch
- Crack (C)
- Hairline Crack (HL)

QUANTITIES:
 SPALL AREAS: **0.0 SF**
 HOLLOW AREAS: 11.3 SF + 2.3 SF + 3.0 SF + 16.9 SF + 3.0 SF 12.1 SF + 6.4 SF + 18.1 SF + 12.8 SF + 5.7 SF + 18.1 SF = **109.7 SF**
 MAP CRACKED AREAS: **0.0 SF**
 TOTAL LENGTH OF CRACKS: **32.0 LF**

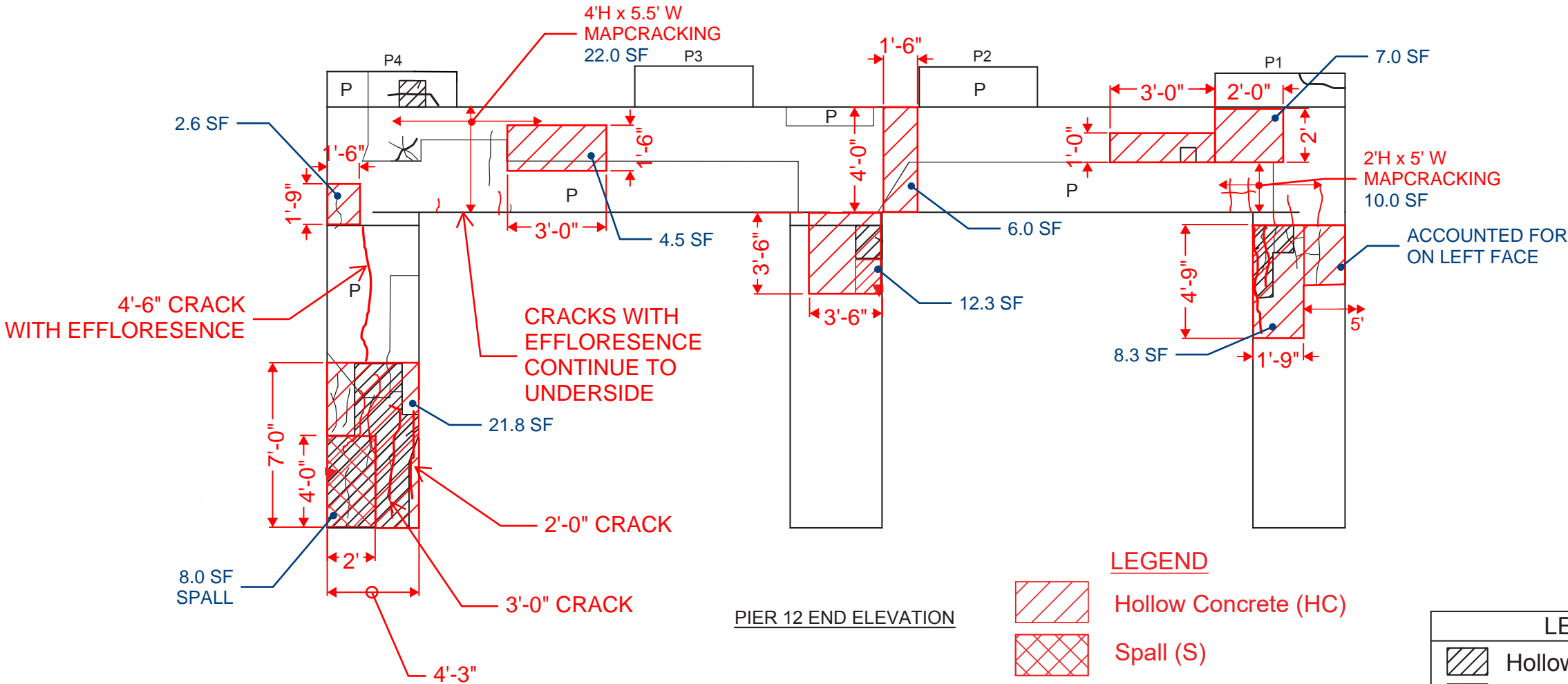
PIER 12 DETERIORATION SKETCH

NOT TO SCALE

* NOTE: P1 LT & P4 RT VIEWS LOCATED ON
PIER 12 DETERIORATION SKETCH
SHEET 1 OF 2



PLAN



PIER 12 END ELEVATION

LEGEND

- Hollow Concrete (HC)
- Spall (S)
- Patch/Repair
- Crack (C)
- Hairline Crack (HL)

LEGEND

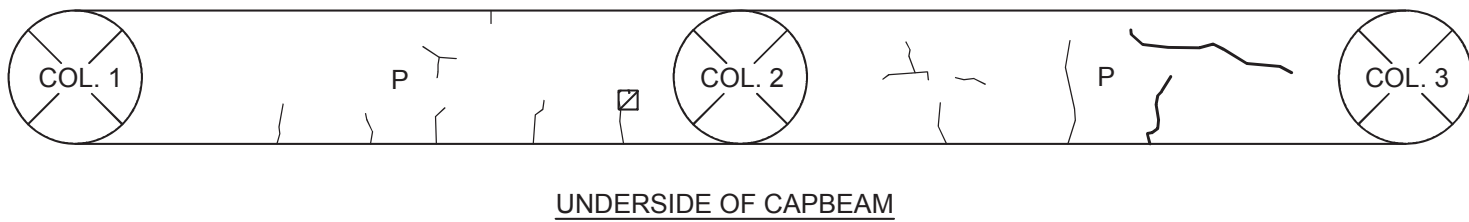
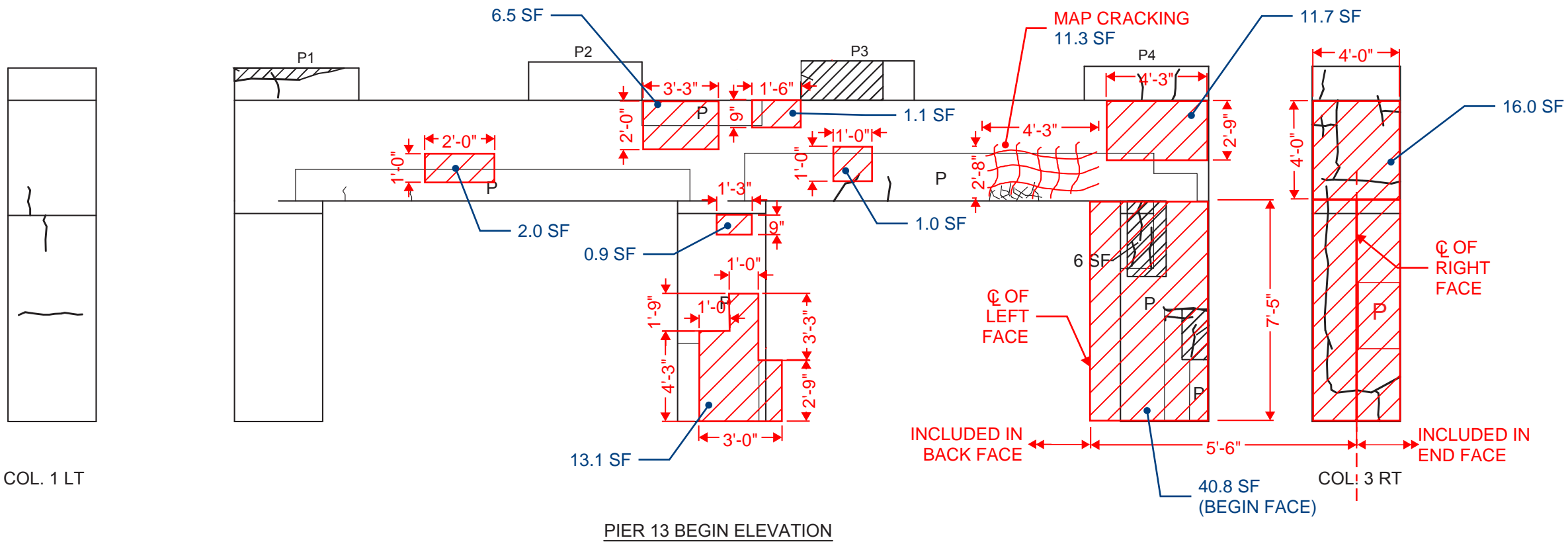
- Hollow Concrete (HC)
- Spall (S)
- Patch
- Crack (C)
- Hairline Crack (HL)

QUANTITIES:

SPALL AREAS: 8.0 SF
HOLLOW AREAS: 21.8 SF + 2.6 SF + 4.5 SF + 12.3 SF + 6.0 SF + 7.0 SF + 8.3 SF = 62.5 SF
MAP CRACKED AREAS: 22.0 SF + 10.0 = 32 SF
TOTAL LENGTH OF CRACKS: 4.5 LF

PIER 13 DETERIORATION SKETCH

NOT TO SCALE



QUANTITIES:
SPALL AREAS: **0.0 SF**
HOLLOW AREAS: 2.0 SF + 6.5 SF + 1.1 SF + 1.0 SF + 0.9 SF + 13.1 SF + 11.7 SF + 16.0 SF + 40.8 SF = **93.1 SF**
MAP CRACKED AREAS: **11.3 SF**
TOTAL LENGTH OF CRACKS: **26.0 LF**

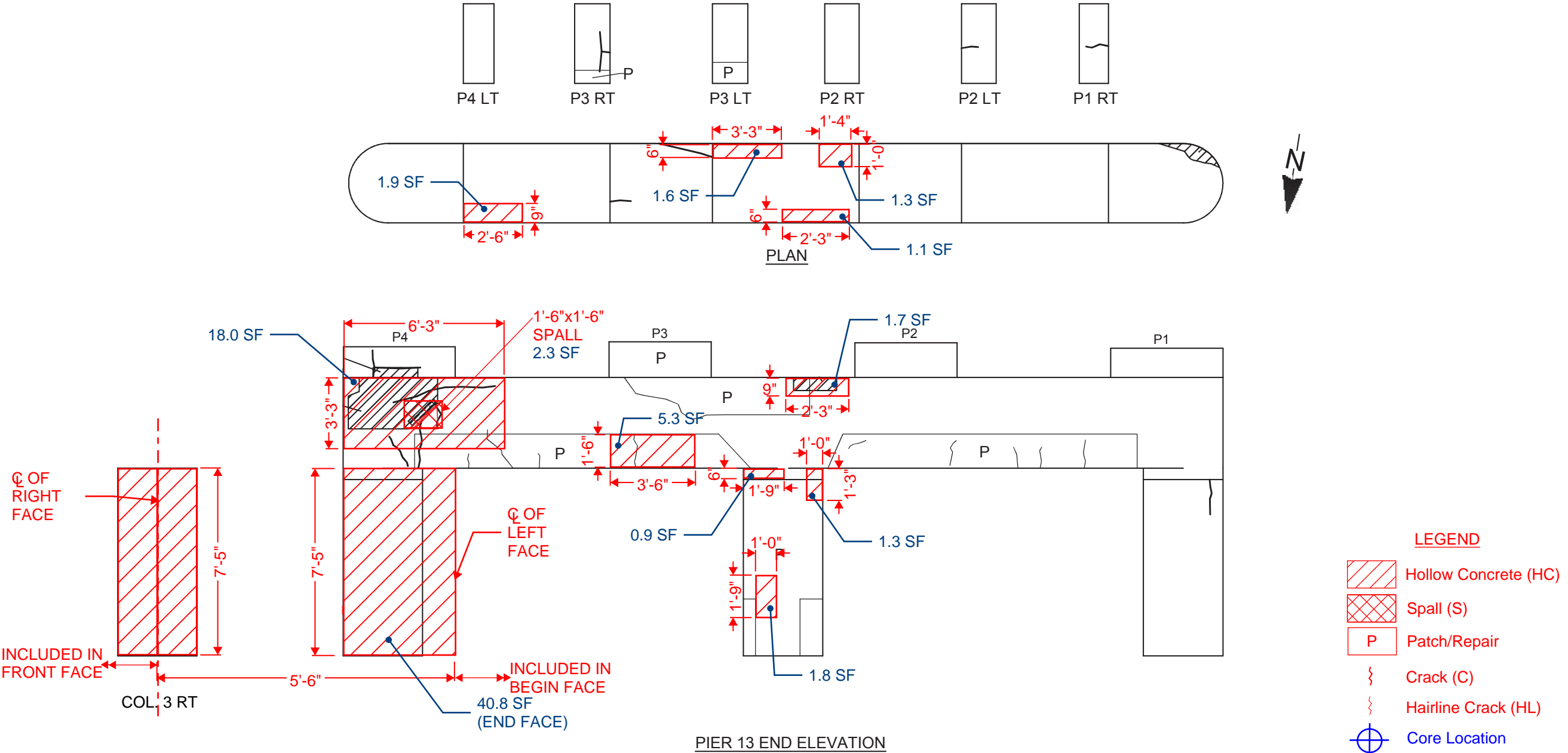
LEGEND	
	Hollow Concrete (HC)
	Spall (S)
	Patch/Repair
	Crack (C)
	Hairline Crack (HL)
	Core Location

LEGEND	
	Hollow Concrete (HC)
	Spall (S)
	Patch
	Crack (C)
	Hairline Crack (HL)

PIER 13 DETERIORATION SKETCH

NOT TO SCALE

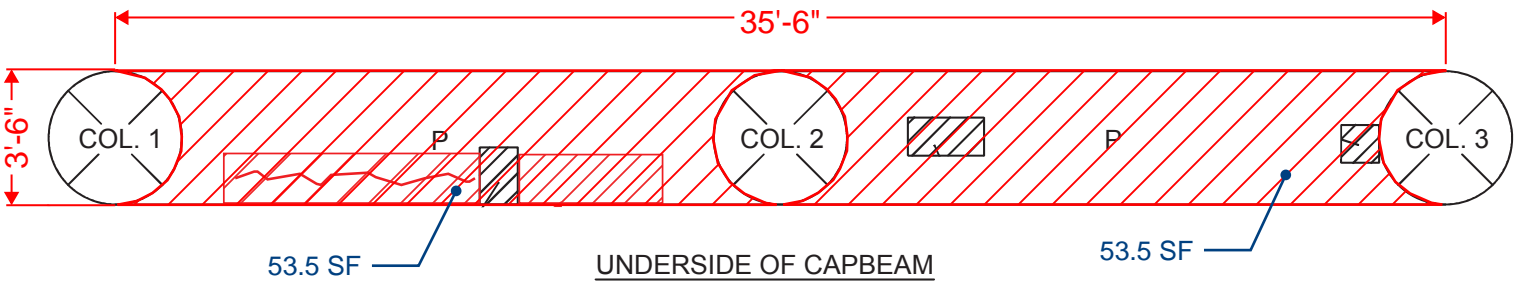
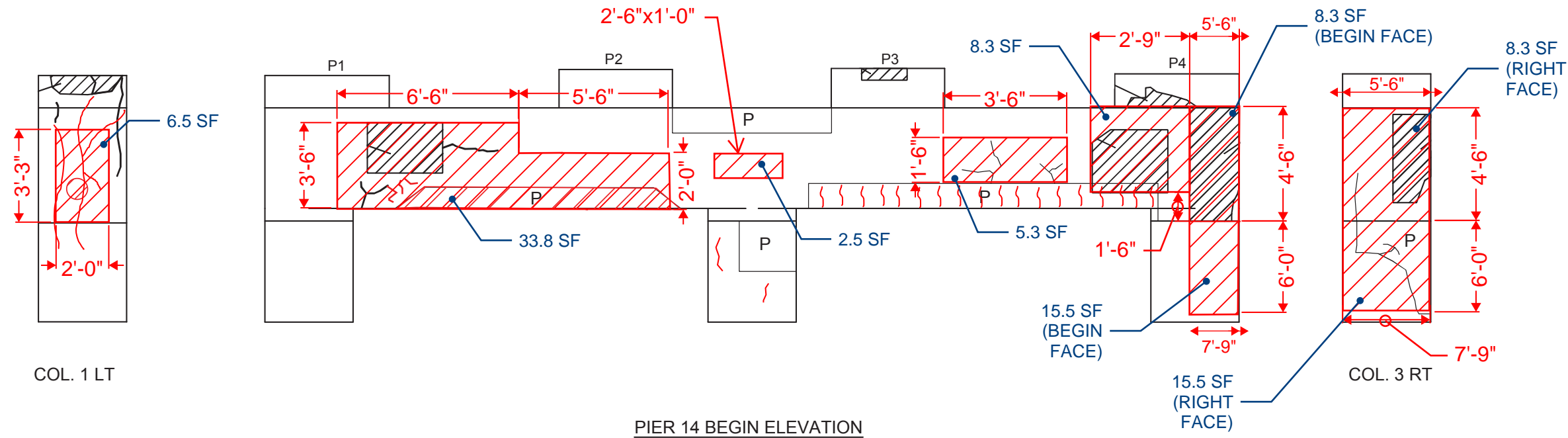
* NOTE: P1 LT & P4 RT VIEWS LOCATED ON
PIER 13 DETERIORATION SKETCH
SHEET 1 OF 2



QUANTITIES:
SPALL AREAS: 2.3 SF
HOLLOW AREAS: 1.9 SF + 1.6 SF + 1.1 SF + 1.3 SF + 40.8 SF + 18.0 SF + 5.3 SF + 1.7 SF + 0.9 SF + 1.3 SF + 1.8 SF = 75.7 SF
MAP CRACKED AREAS: 0.0 SF
TOTAL LENGTH OF CRACKS: 16.0 LF

PIER 14 DETERIORATION SKETCH

NOT TO SCALE



LEGEND

- Hollow Concrete (HC)
- Spall (S)
- Patch/Repair
- Crack (C)
- Hairline Crack (HL)

LEGEND

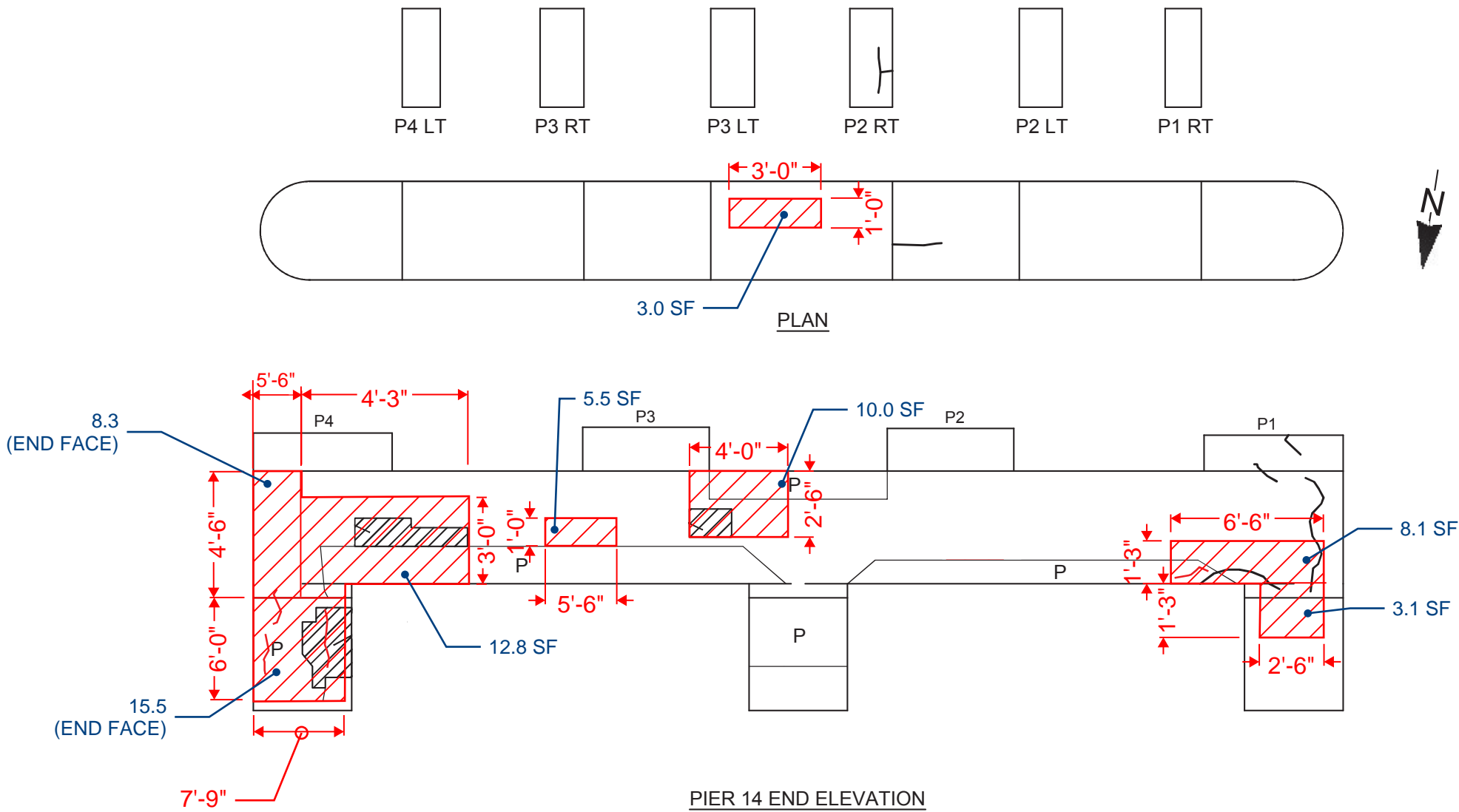
- Hollow Concrete (HC)
- Spall (S)
- Patch
- Crack (C)
- Hairline Crack (HL)

QUANTITIES:
SPALL AREAS: **0.0 SF**
HOLLOW AREAS: 6.5 SF + 33.8 SF + 2.5 SF + 5.3 SF + 8.3 SF + 8.3 SF + 8.3 SF
+ 15.5 SF + 15.5 SF + 53.5 SF + 53.5 SF = **202.7 SF**
MAP CRACKED AREAS: **0.0 SF**
TOTAL LENGTH OF CRACKS: **26.0 LF**

PIER 14 DETERIORATION SKETCH

NOT TO SCALE

* NOTE: P1 LT & P4 RT VIEWS LOCATED ON
PIER 14 DETERIORATION SKETCH
SHEET 1 OF 2



QUANTITIES:
SPALL AREAS: **0.0 SF**
HOLLOW AREAS: 8.3 SF + 15.5 SF + 12.8 SF + 5.5 SF + 10.0 SF + 8.1 SF + 3.1 SF = **63.3 SF**
MAP CRACKED AREAS: **0.0 SF**
TOTAL LENGTH OF CRACKS: **4.0 LF**

LEGEND

- Hollow Concrete
- Spall (S)
- Patch/Repair
- Crack (C)
- Hairline Crack (HL)

LEGEND

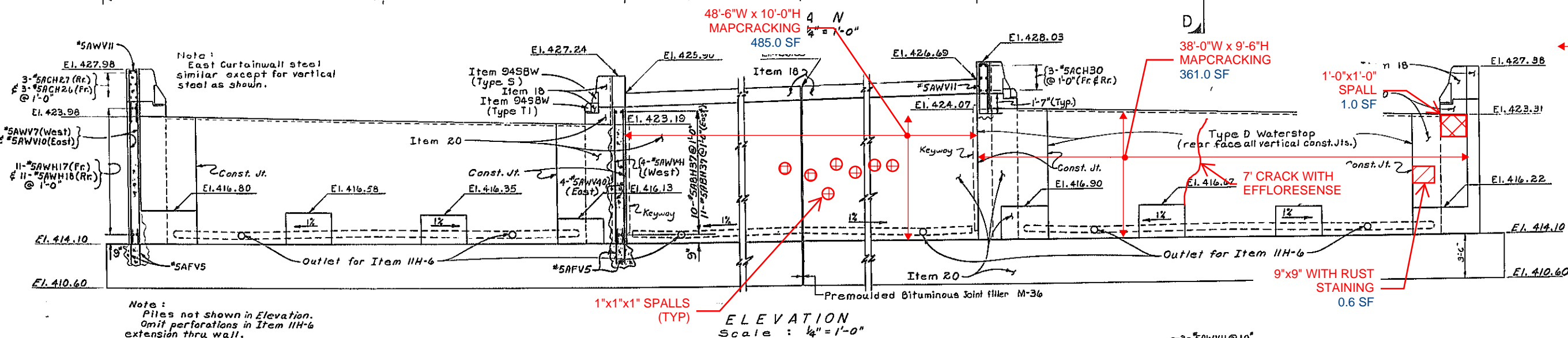
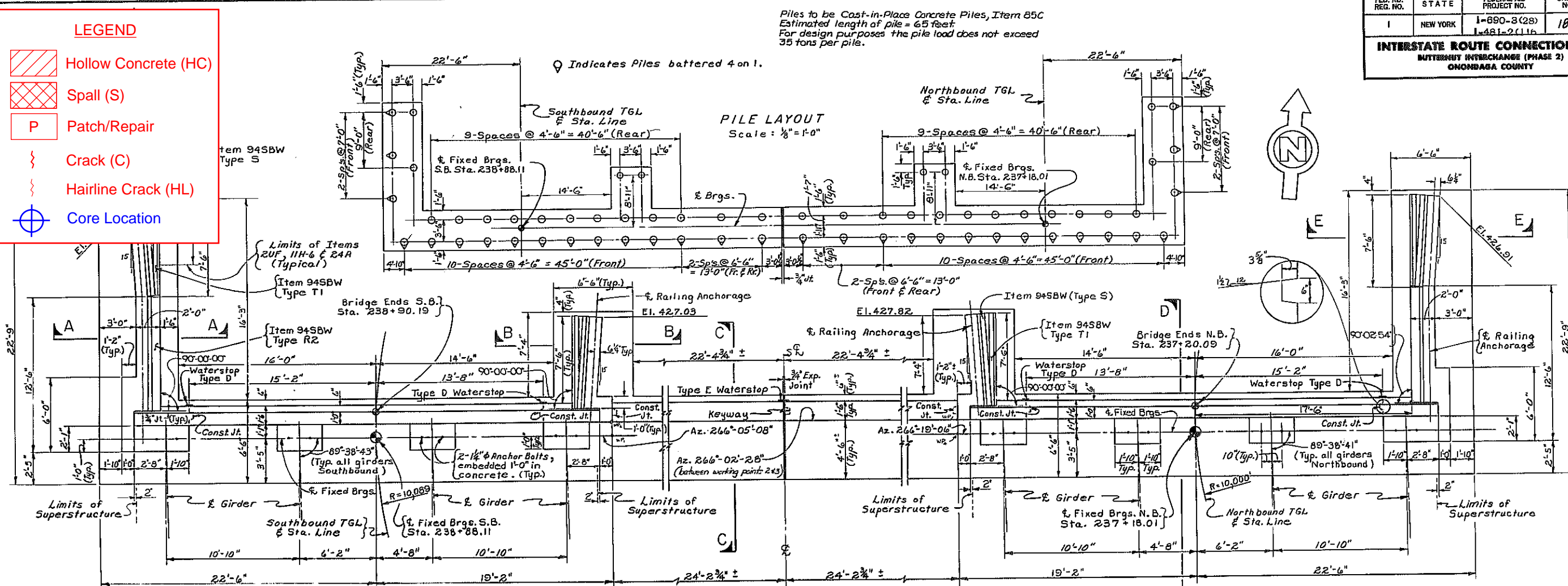
- Hollow Concrete (HC)
- Spall (S)
- Patch
- Crack (C)
- Hairline Crack (HL)

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	1-690-3(28) 1-481-2(116)	185	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

LEGEND

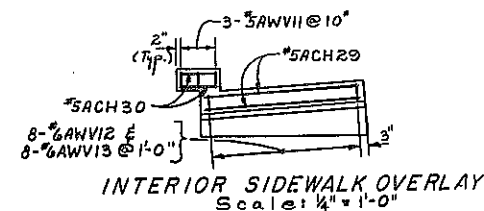
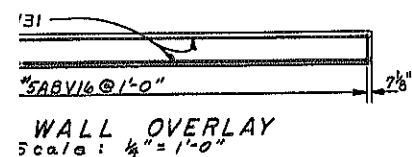
	Hollow Concrete (HC)
	Spall (S)
	Patch/Repair
	Crack (C)
	Hairline Crack (HL)
	Core Location



PROJECT ENGINEER R. Parker
IN CHARGE OF F. Eckel
DESIGNED BY K.H.W. & Raul
DESIGN CHECKED BY J.B. Sherman
DETAILED BY J.C. Thompson
DETAIL CHECKED BY D.H. Smith

QUANTITIES:

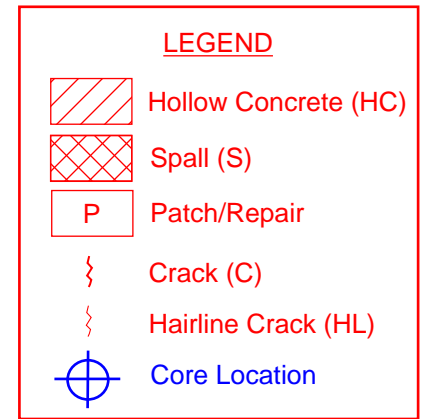
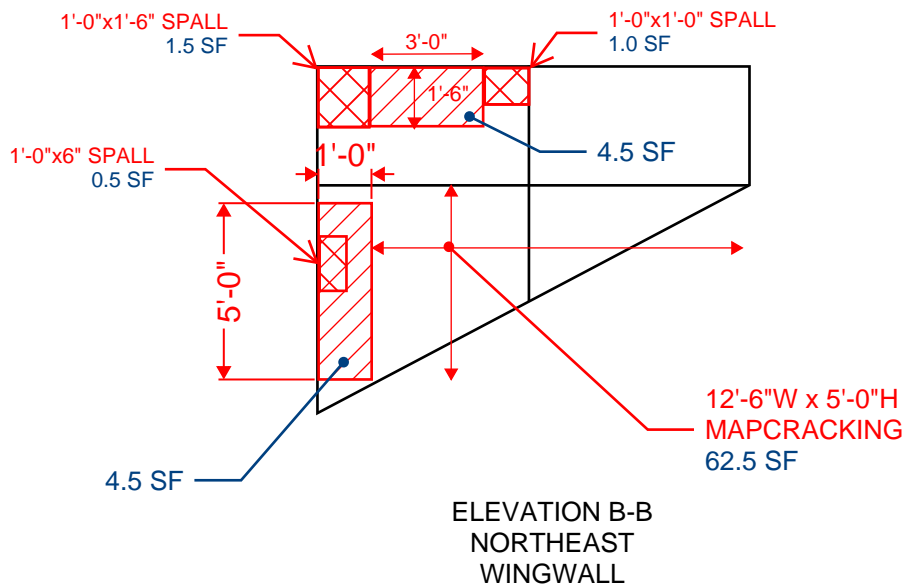
SPALL AREAS: 1.0 SF
HOLLOW AREAS: 0.6 SF
MAP CRACKED AREAS: 485.0 SF + 361.0 SF = 846.0 SF
TOTAL LENGTH OF CRACKS: 7 LF



SEE NEXT PAGE FOR
ELEVATION B-B

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS
NORTHBOUND BIN 1093572
NORTH ABUTMENTS

DRAWING NO. 7 OF 50



QUANTITIES:

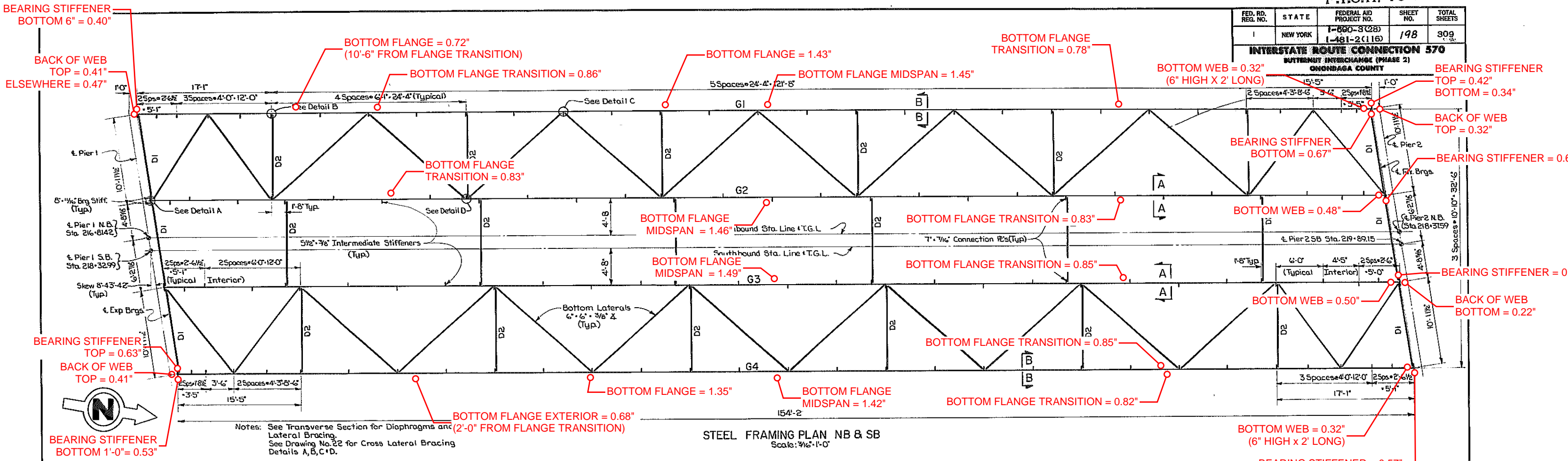
SPALL AREAS: 0.5 SF + 1.5 SF + 1.0 SF = **3.0 SF**

HOLLOW AREAS: 4.5 SF + 4.5 SF = **9.0 SF**

MAP CRACKED AREAS: **62.5 SF**

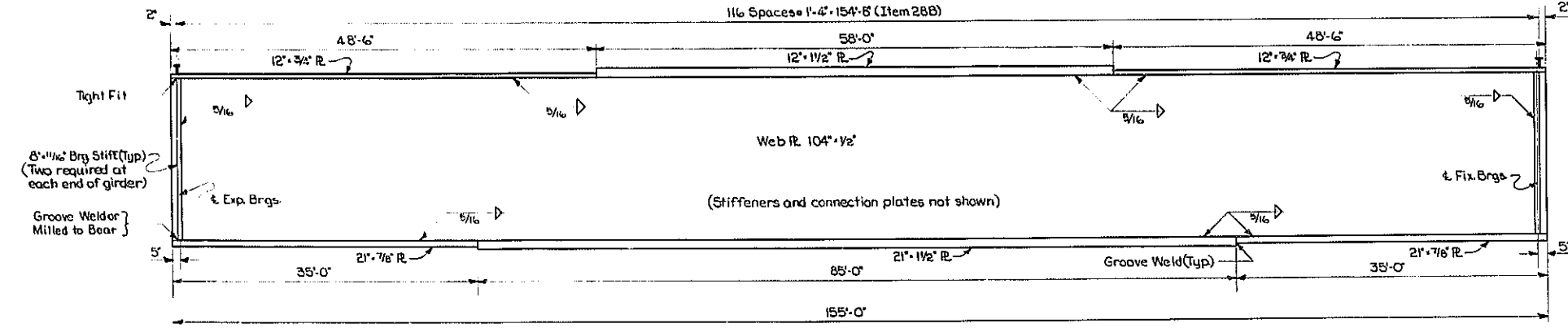
TOTAL LENGTH OF CRACKS: **0 LF**

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	1-880-3(28) 1-481-2(116)	198	309
INTERSTATE ROUTE CONNECTION 570 BUTTERNUT INTERCHANGE (PHASE 2) ONEIDA COUNTY				

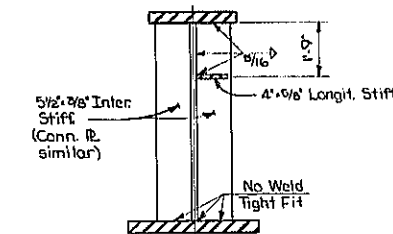


Notes: See Transverse Section for Diaphragms and Lateral Bracing.
See Drawing No. 22 for Cross Lateral Bracing Details A, B, C & D.

STEEL FRAMING PLAN NB & SB
Scale: 3/16" = 1'-0"

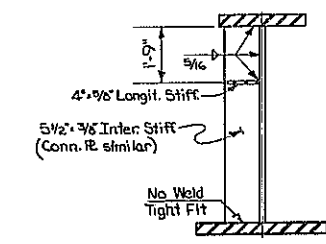


FASCIA & INTERIOR GIRDER ELEVATION NB & SB
Not to Scale



SECTION A-A
Not to Scale

Notes:
Web and flanges shall be A.S.T.M. designation A441 Steel.
Stiffeners, connection plates, diaphragms, lateral bracing and gusset plates shall be A.S.T.M. designation A36 Steel.
For details of bearings see Dwg. No. 42 & 43.
Stud Shear Connectors shall be 6" high.



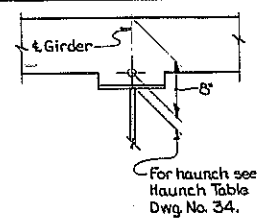
SECTION B-B
Not to Scale

VERTICAL CLEARANCE
MAIN #1 - 24'
MAIN #2 - 25'

BRIDGE NO. 2
INTERSTATE ROUTE 381 OVER
DEWITT YARDS
SPAN 2 NORTHBOUND
BIN 1093572 10.20 OF 50

GIRDER	SPAN	THEO. BOTTOM OF SLAB ELEVATIONS			DEFLECTIONS (FT.)			CAMBER		
		EXP. BRGS.	FIX. BRGS.	STEEL SLAB	SD.L.	TOT.	V.C.C.	TOTAL	(FT.)	(IN.)
G1 NB	2	447.67	448.52	449.23	.08	.16	.07	.31	.07	.38 4 1/4
G2 NB	2	447.92	448.76	449.47	.08	.24	.07	.39	.07	.46 5 1/2
G3 NB	2	447.91	448.75	449.45	.08	.24	.07	.39	.07	.46 5 1/2
G4 NB	2	447.70	448.54	449.24	.08	.16	.07	.31	.07	.38 4 1/4
G1 SB	2	447.48	448.35	449.08	.08	.16	.07	.31	.07	.38 4 1/4
G2 SB	2	447.73	448.60	449.32	.08	.24	.07	.39	.07	.46 5 1/2
G3 SB	2	447.78	448.63	449.37	.08	.24	.07	.39	.07	.46 5 1/2
G4 SB	2	447.58	448.44	449.16	.08	.16	.07	.31	.07	.38 4 1/4

V.C.C. - Vertical Curve Correction
S.D.L. - Superimposed Dead Load, includes weight of railing.

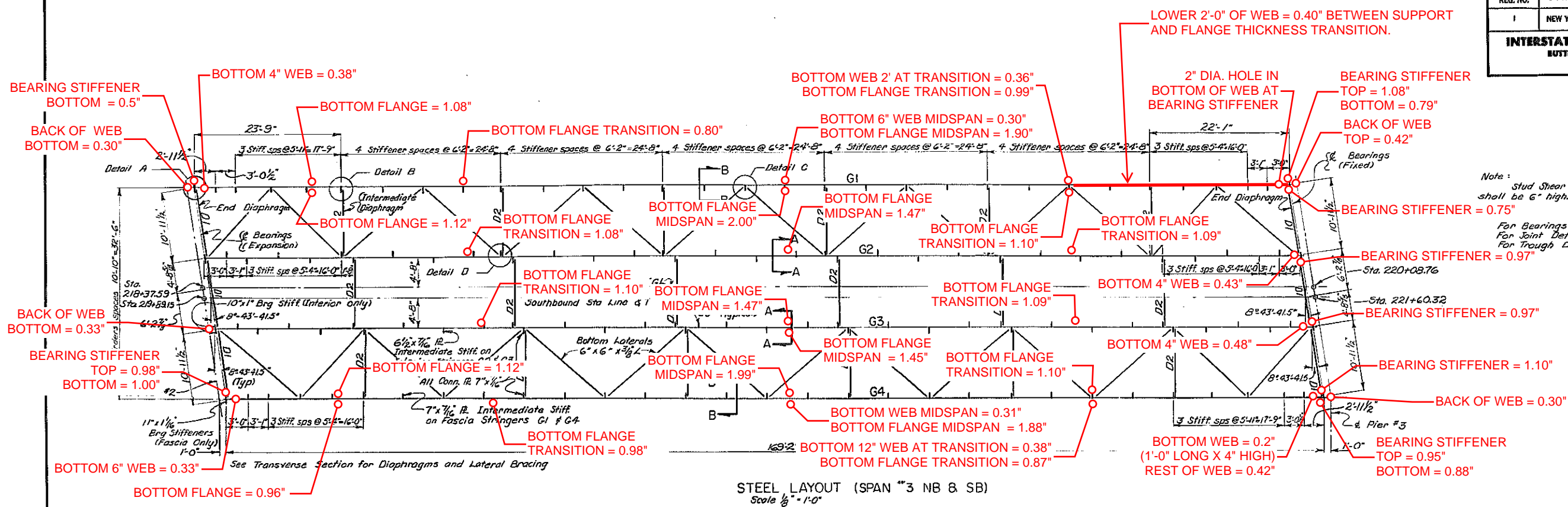


PROJECT ENGINEER R.L. Parker
IN CHARGE OF F. Eckel
DESIGNED BY N.A. Topps
DESIGN CHECKED BY R. Thimble
DETAILED BY J.E. Dorsey
DETAIL CHECKED BY R.L. Parker

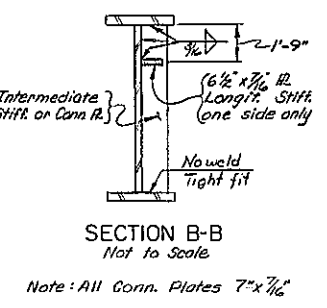
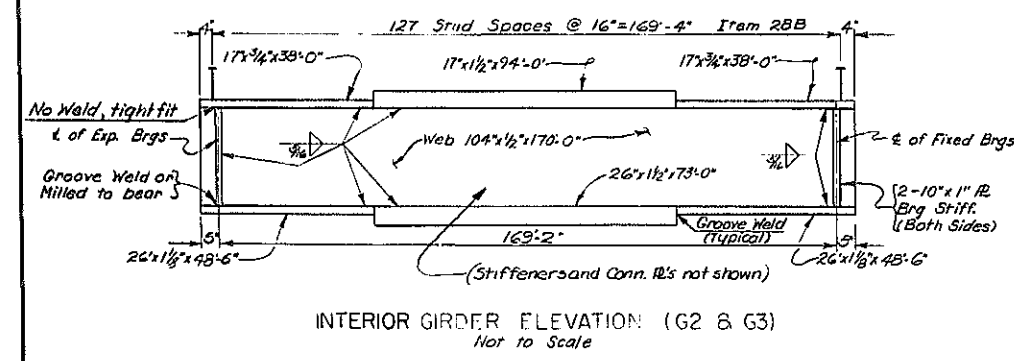
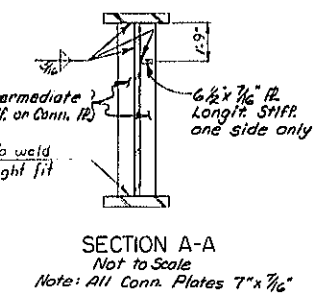
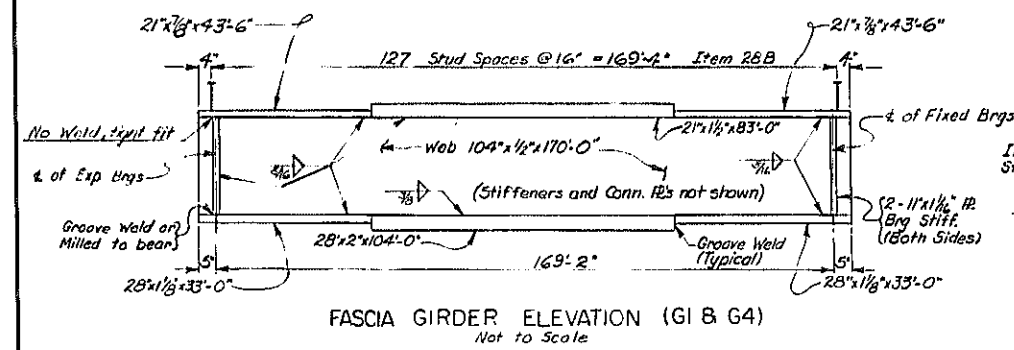
De Witt Yds. Span 2 Steel layout

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	1-680-3(28) 1-481-2(116)	199	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



Note: Stud Shear Connectors shall be 6" high.
For Bearings Details see Drawing # 42 and 43
For Joint Details see Drawing # 31
For Trough Details see Drawing # 39

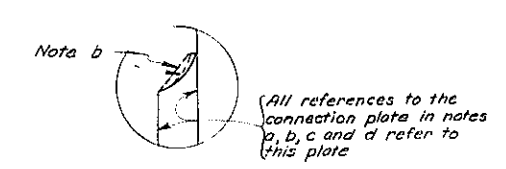
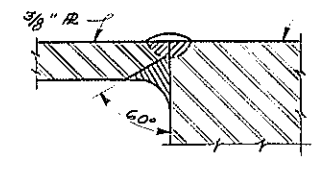


Height of Haunch varies (see Table of Haunch Heights Drawing No. 34)
Bottom of Slab elevations shown in table are computed for this

GIRDER	NORTHBOUND			SOUTHBOUND			D.L. DEFLECTION			CAMBER		
	THEO. BOT. OF SLAB EL.	± SO. BRG	± SPAN	THEO. BOT. OF SLAB EL.	± SO. BRG	± SPAN	STEEL (F.T.)	SLAB (F.T.)	S.D.L. (F.T.)	TOTAL (F.T.)	V.C.C. (F.T.)	TOTAL (F.T.)
SPAN 3	± 50.87	± 50.87	± 50.87	± 50.87	± 50.87	± 50.87						
G1	449.24	449.85	450.29	449.10	449.74	450.20	.11	.15	.11	.37	.08	.45
G2	449.48	450.09	450.52	449.34	449.97	450.44	.12	.29	.04	.45	.08	.53
G3	449.46	450.07	450.50	449.39	450.02	450.48	.12	.29	.04	.45	.08	.53
G4	449.25	449.85	450.28	449.18	449.80	450.26	.11	.15	.11	.37	.08	.45

S.D.L. = superimposed dead load, includes weight of parapet and railing.
V.C.C. = vertical curve correction

Top of Bottom Flange when bottom flange is in tension
Bottom of Top Flange when top flange is in tension



Note:
a. The connection plate shall be prepared and welded as a single bevel groove weld as shown in Detail '1'. It shall then be Air Carbon-Arc gouged from the second side into sound weld metal and then welded as detailed. All welding shall be in the flat or 'downhand' position.
b. The plate may be of any shape that will provide after welding, cutting, and finish grinding a smooth transition from the flange edge of a minimum radius of 12".
c. Both the connection plate and flange are to be the same type of steel.
d. Field welding to the connection plate will not be permitted.

PROJECT ENGINEER R. PARKER
IN CHARGE OF F. W. ECKEL
DESIGNED BY S. P. ROSE
DESIGN CHECKED BY H. THOMPSON
DETAILED BY W. QUAYSON
DETAIL CHECKED BY D. H. SMITH

The webs, flanges and gusset plates for bottom lateral bracing for the Span 3 girders shall be A.S.T.M. Designation A441 steel. Stiffeners, diaphragms, bearings, and bottom lateral bracing (except gusset plates) shall be A.S.T.M. A36 steel.

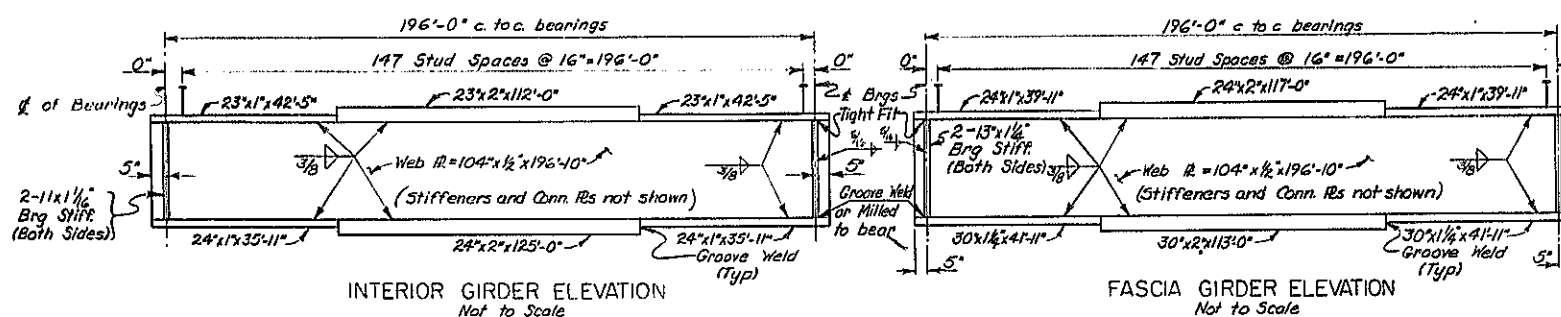
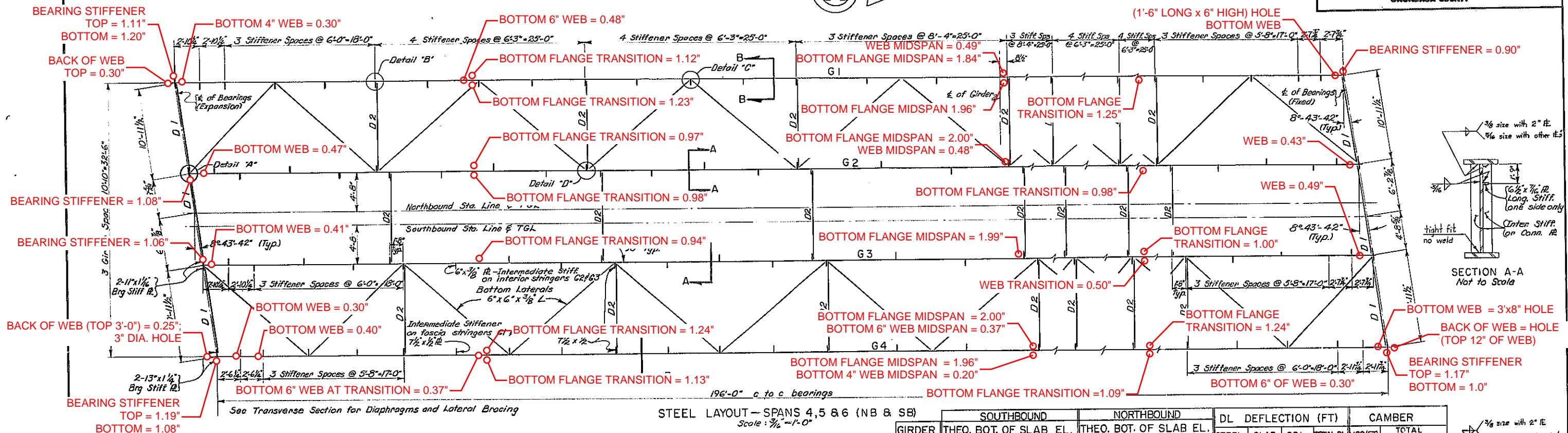
LATERAL BRACING DETAILS
Not to Scale

For additional details of bottom lateral bracing see drawing No. 22

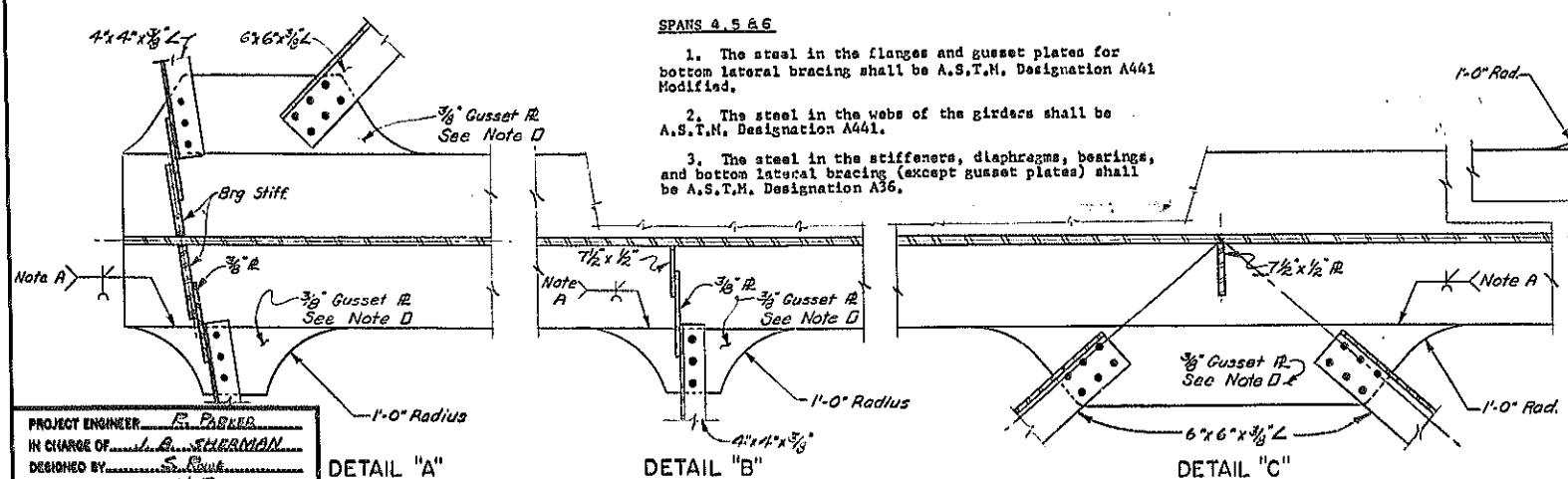
NOTE: CONSIDER REPLACING END DIAPHRAGMS AND GUSSET PLATES AT GIRDER ENDS.

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

SPAN 3 NORTHBOUND
BIN 1093572



GIRDER	SOUTHBOUND						NORTHBOUND						DL DEFLECTION (FT)				CAMBER	
	THEO. BOT. OF SLAB EL.						THEO. BOT. OF SLAB EL.						STEEL	SLAB	SDL	TOTAL DL	VCC(FT)	TOTAL
	← SO. BRG	← SPAN	← NO. BRG	← SO. BRG	← SPAN	← NO. BRG	← SO. BRG	← SPAN	← NO. BRG	FEET	INCHES							
SPAN 4	450.21	450.54	450.63	450.30	450.59	450.66	0.172'	0.212'	0.168'	0.552'	0.113'	0.665'	8"					
G1	450.21	450.54	450.63	450.30	450.59	450.66	0.172'	0.212'	0.168'	0.552'	0.113'	0.665'	8"					
G2	450.45	450.77	450.86	450.53	450.82	450.89	0.178'	0.378'	0.062'	0.618'	0.113'	0.731'	8 1/2"					
G3	450.45	450.80	450.89	450.51	450.80	450.85	0.178'	0.378'	0.062'	0.618'	0.113'	0.731'	8 1/2"					
G4	450.27	450.58	450.67	450.29	450.57	450.63	0.172'	0.212'	0.168'	0.552'	0.113'	0.665'	8"					
SPAN 5																		
G1	450.63	450.50	450.14	450.66	450.50	450.10	0.172'	0.212'	0.168'	0.552'	0.113'	0.665'	8"					
G2	450.86	450.72	450.36	450.89	450.72	450.32	0.178'	0.378'	0.062'	0.618'	0.113'	0.731'	8 1/2"					
G3	450.89	450.75	450.38	450.85	450.68	450.28	0.178'	0.378'	0.062'	0.618'	0.113'	0.731'	8 1/2"					
G4	450.66	450.52	450.15	450.63	450.45	450.05	0.172'	0.212'	0.168'	0.552'	0.113'	0.665'	8"					
SPAN 6																		
G1	450.13	449.54	448.72	450.09	449.47	448.62	0.172'	0.212'	0.168'	0.552'	0.113'	0.665'	8"					
G2	450.35	449.75	448.93	450.31	449.68	448.83	0.178'	0.378'	0.062'	0.618'	0.113'	0.731'	8 1/2"					
G3	450.37	449.77	448.94	450.27	449.64	448.78	0.178'	0.378'	0.062'	0.618'	0.113'	0.731'	8 1/2"					
G4	450.14	449.53	448.70	450.04	449.40	448.54	0.172'	0.212'	0.168'	0.552'	0.113'	0.665'	8"					



Note:

- The connection plate shall be prepared and welded as a single bevel groove weld as shown in Detail. It shall then be air carbon-arc gouged from the second side into sound weld metal and then welded as detailed. All welding shall be in the flat or "downhand" position.
- The plate may be of any shape that will provide after welding, cutting, and finish grinding a smooth transition from the flange edge at a minimum radius of 12".
- Lateral bracing shall be attached to gusset plates with $\frac{3}{8}$ " ϕ high strength bolts. Field welding will not be permitted.
- The gusset plate shall be the same type of steel as the flange to which it is welded.

PROJECT ENGINEER R. FASLER
IN CHARGE OF L.B. SHERMAN
DESIGNED BY S. FINE
DESIGN CHECKED BY N. TRAVIS
DETAILED BY Jtte Durant
DETAIL CHECKED BY D.H. Smith

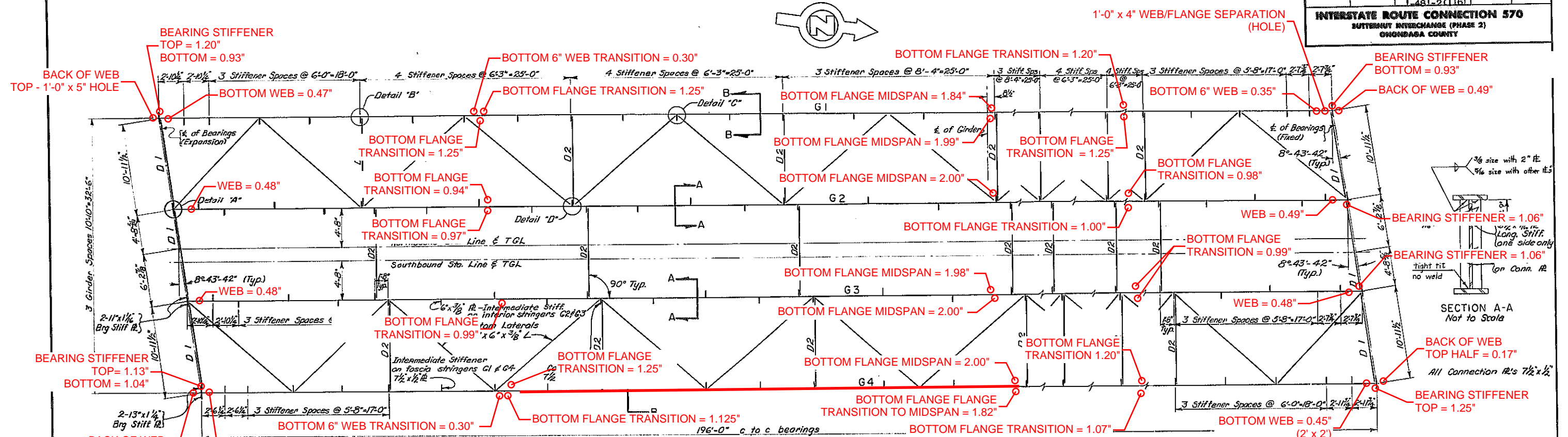
Note:
Stud shear connectors shall be 6" high
For Bearing Details see Drawing #42 and #43
For Joint Details see Drawing #31
For Trough Details see Drawing #39

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS
SPANS 4 NORTHBOUND
BIN 1093572

LENGTH = 196'-6"

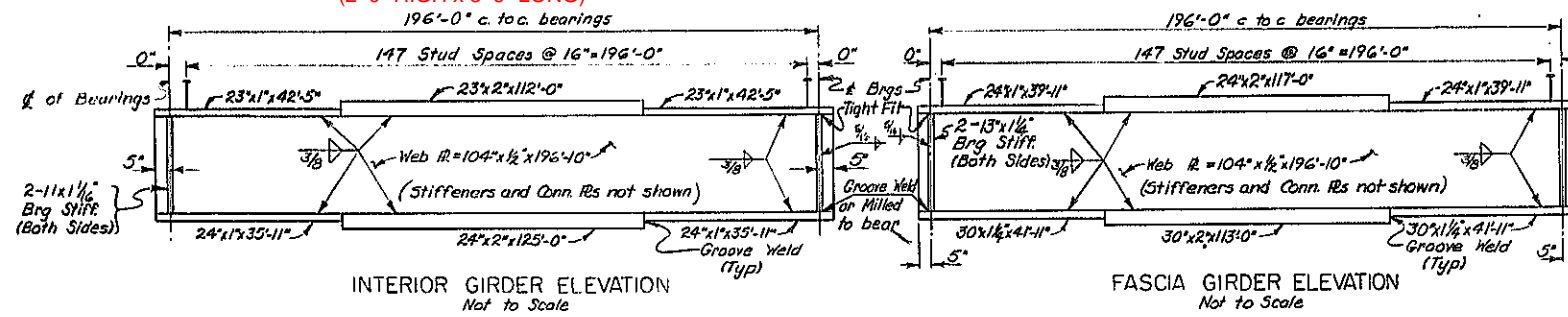
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	1-090-3(28) 1-481-2(116)	200	309

INTERSTATE ROUTE CONNECTION 570
SUTHERN INTERCHANGE (PHASE 2)
ONEIDA COUNTY



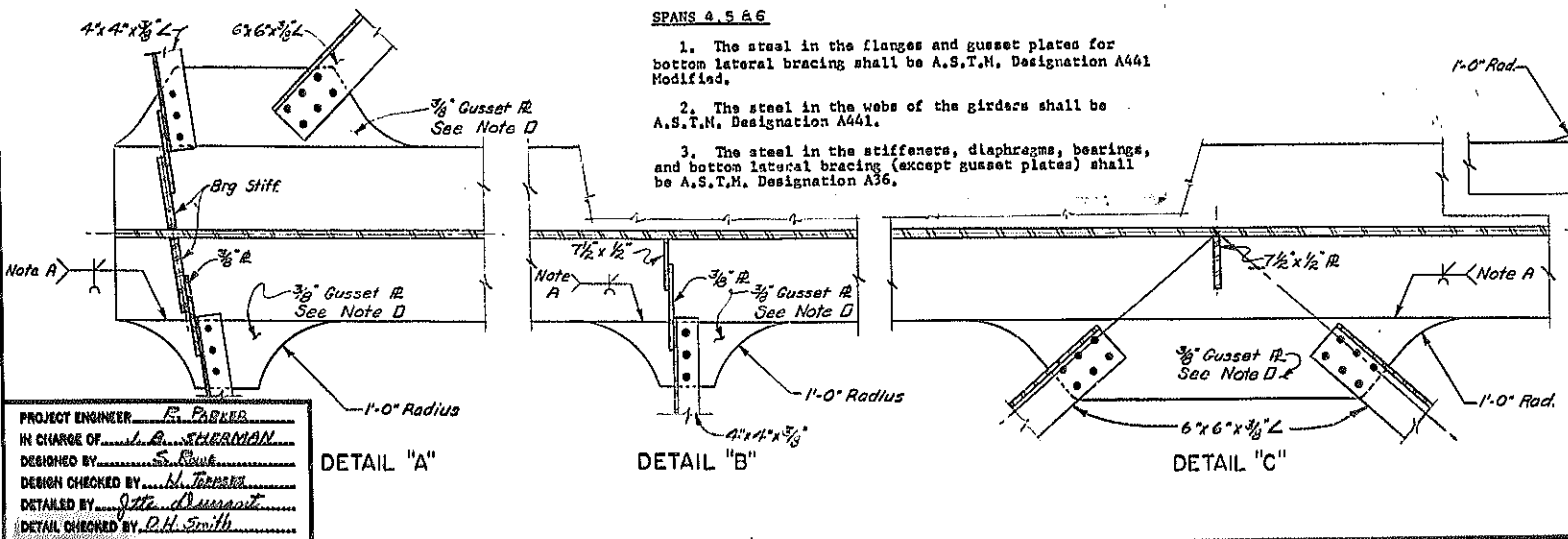
STEEL LAYOUT - SPANS 4, 5 & 6 (NB & SB)
Scale: 3/8" = 1'-0"

GIRDER	SOUTHBOUND						NORTHBOUND						DL DEFLECTION (FT)				CAMBER	
	THEO. BOT. OF SLAB EL.	± SO. BRG	± SPAN	± NO. BRG	± SO. BRG	± SPAN	± NO. BRG	THEO. BOT. OF SLAB EL.	± SO. BRG	± SPAN	± NO. BRG	THEO. BOT. OF SLAB EL.	STEEL	SLAB	SDL	TOTAL DL	VCC (FT)	TOTAL FEET INCHES
SPAN 4																		
G1	450.21	450.54	450.63	450.30	450.59	450.66	450.66	0.172	0.212	0.168	0.552	0.113	0.665	8"				
G2	450.45	450.77	450.86	450.53	450.82	450.89	450.89	0.178	0.378	0.062	0.618	0.113	0.731	8 1/2"				
G3	450.48	450.80	450.89	450.51	450.80	450.85	450.85	0.178	0.378	0.062	0.618	0.113	0.731	8 1/2"				
G4	450.27	450.38	450.67	450.29	450.57	450.63	450.63	0.172	0.212	0.168	0.552	0.113	0.665	8"				
SPAN 5																		
G1	450.63	450.50	450.14	450.66	450.50	450.10	450.10	0.172	0.212	0.168	0.552	0.113	0.665	8"				
G2	450.86	450.72	450.36	450.89	450.72	450.32	450.32	0.178	0.378	0.062	0.618	0.113	0.731	8 1/2"				
G3	450.89	450.75	450.38	450.85	450.65	450.28	450.28	0.178	0.378	0.062	0.618	0.113	0.731	8 1/2"				
G4	450.66	450.52	450.15	450.63	450.45	450.05	450.05	0.172	0.212	0.168	0.552	0.113	0.665	8"				
SPAN 6																		
G1	450.13	449.54	448.72	450.09	449.47	448.62	448.62	0.172	0.212	0.168	0.552	0.113	0.665	8"				
G2	450.35	449.75	448.93	450.31	449.68	448.83	448.83	0.178	0.378	0.062	0.618	0.113	0.731	8 1/2"				
G3	450.37	449.77	448.94	450.27	449.64	448.78	448.78	0.178	0.378	0.062	0.618	0.113	0.731	8 1/2"				
G4	450.14	449.53	448.70	450.04	449.40	448.54	448.54	0.172	0.212	0.168	0.552	0.113	0.665	8"				



INTERIOR GIRDER ELEVATION
Not to Scale

FASCIA GIRDER ELEVATION
Not to Scale



DETAIL "D"

Note:
Stud shear connectors shall be 6" high
For Bearing Details see Drawing #42 and #43
For Joint Details see Drawing #31
For Trough Details see Drawing #39

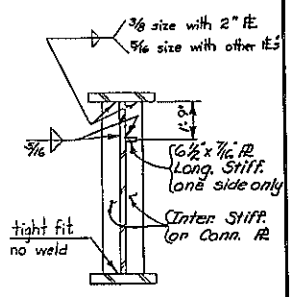
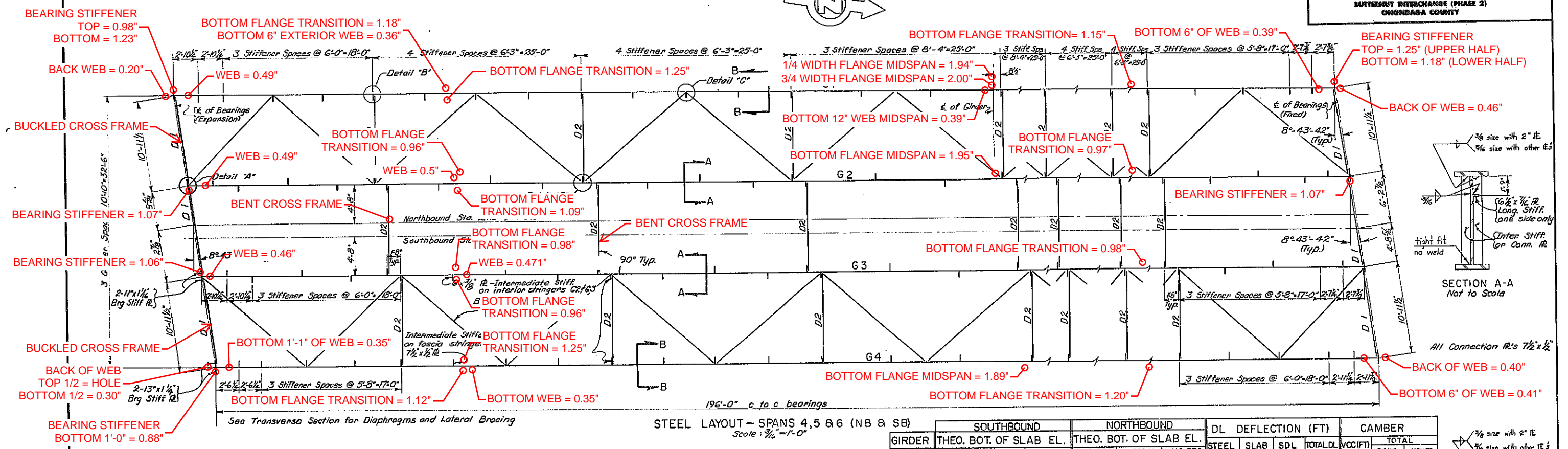
Note:
A. The connection plate shall be prepared and welded as a single bevel groove weld as shown in Detail #1. It shall then be Air Carbon-Arc gouged from the second side into sound weld metal and then welded as detailed. All welding shall be in the flat or "downhand" position.
B. The plate may be of any shape that will provide after welding, cutting, and finish grinding a smooth transition from the flange edge of a minimum radius of 12".
C. Lateral bracing shall be attached to gusset plates with 3/8" & high strength bolts. Field welding will not be permitted.
D. The gusset plate shall be the same type of steel as the flange to which it is welded.

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS
SPAN 5 NORTHBOUND
BIN 1093572

PROJECT ENGINEER: R. PARKER
IN CHARGE OF: J. R. SHERMAN
DESIGNED BY: S. R. R. R.
DESIGN CHECKED BY: M. T. T. T.
DETAILED BY: J. T. T. T.
DETAIL CHECKED BY: D. H. SMITH

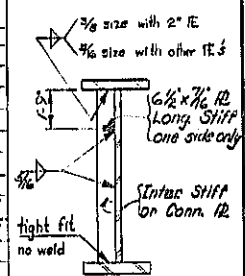
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	1-090-3(28) 1-481-2(116)	200	309

INTERSTATE ROUTE CONNECTION 570
SUTTERLY INTERCHANGE (PHASE 2)
ONEIDA COUNTY



SECTION A-A
Not to Scale

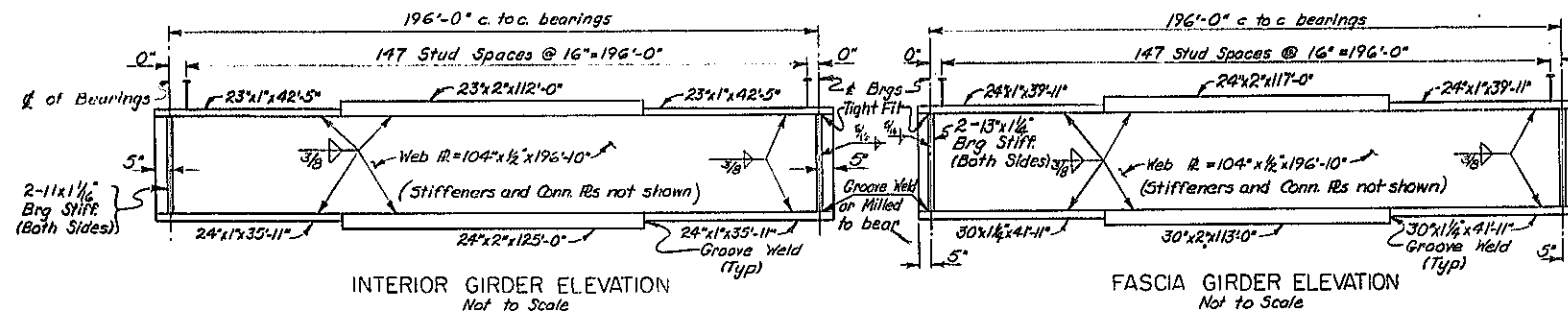
196'-0\"/>



SECTION B-B
Not to Scale

STEEL LAYOUT - SPANS 4, 5 & 6 (NB & SB)
Scale: 3/8\"/>

GIRDER	SOUTHBOUND				NORTHBOUND				DL DEFLECTION (FT)				CAMBER	
	THEO. BOT. OF SLAB EL.	± SPAN	± NO. BRG	± SO. BRG	THEO. BOT. OF SLAB EL.	± SPAN	± NO. BRG	± NO. BRG	STEEL	SLAB	SDL	TOTAL DL	VCC (FT)	TOTAL FEET INCHES
SPAN 4														
G1	450.21	450.54	450.63	450.30	450.59	450.66	0.172	0.212	0.168	0.552	0.113	0.665	8"	
G2	450.45	450.77	450.86	450.53	450.82	450.89	0.178	0.378	0.062	0.618	0.113	0.731	8 1/2"	
G3	450.48	450.80	450.89	450.51	450.80	450.85	0.178	0.378	0.062	0.618	0.113	0.731	8 1/2"	
G4	450.27	450.38	450.67	450.29	450.57	450.63	0.172	0.212	0.168	0.552	0.113	0.665	8"	
SPAN 5														
G1	450.63	450.50	450.14	450.66	450.50	450.10	0.172	0.212	0.168	0.552	0.113	0.665	8"	
G2	450.86	450.72	450.36	450.89	450.72	450.32	0.178	0.378	0.062	0.618	0.113	0.731	8 1/2"	
G3	450.89	450.75	450.38	450.85	450.65	450.28	0.178	0.378	0.062	0.618	0.113	0.731	8 1/2"	
G4	450.66	450.52	450.15	450.63	450.45	450.05	0.172	0.212	0.168	0.552	0.113	0.665	8"	
SPAN 6														
G1	450.13	449.54	448.72	450.09	449.47	448.62	0.172	0.212	0.168	0.552	0.113	0.665	8"	
G2	450.35	449.75	448.93	450.31	449.68	448.83	0.178	0.378	0.062	0.618	0.113	0.731	8 1/2"	
G3	450.37	449.77	448.94	450.27	449.64	448.78	0.178	0.378	0.062	0.618	0.113	0.731	8 1/2"	
G4	450.14	449.53	448.70	450.04	449.40	448.54	0.172	0.212	0.168	0.552	0.113	0.665	8"	

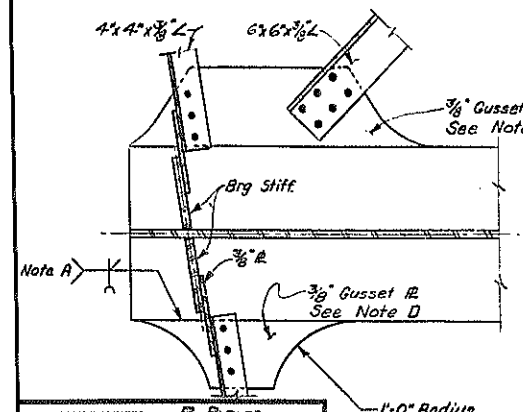


INTERIOR GIRDER ELEVATION
Not to Scale

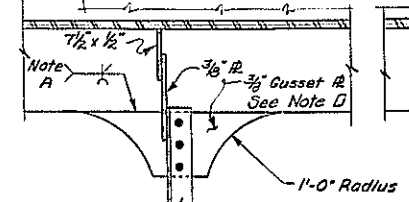
FASCIA GIRDER ELEVATION
Not to Scale

SPANS 4, 5 & 6

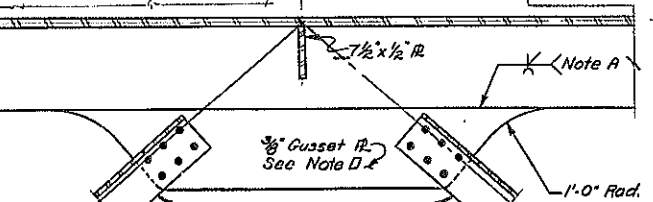
1. The steel in the flanges and gusset plates for bottom lateral bracing shall be A.S.T.M. Designation A441 Modified.
2. The steel in the webs of the girders shall be A.S.T.M. Designation A441.
3. The steel in the stiffeners, diaphragms, bearings, and bottom lateral bracing (except gusset plates) shall be A.S.T.M. Designation A36.



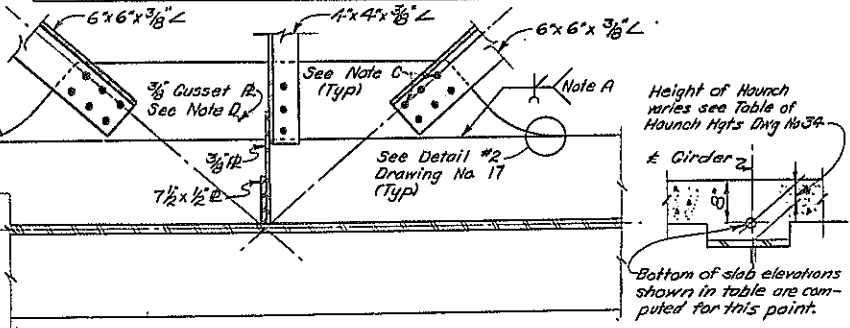
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

Note:
A. The connection plate shall be prepared and welded as a single bevel groove weld as shown in Detail A. It shall then be Air Carbon-Arc gouged from the second side into sound weld metal and then welded as detailed. All welding shall be in the flat or "downhand" position.
B. The plate may be of any shape that will provide after welding, cutting, and finish grinding a smooth transition from the flange edge of a minimum radius of 12".
C. Lateral bracing shall be attached to gusset plates with 3/8" & high strength bolts. Field welding will not be permitted.
D. The gusset plate shall be the same type of steel as the flange to which it is welded.

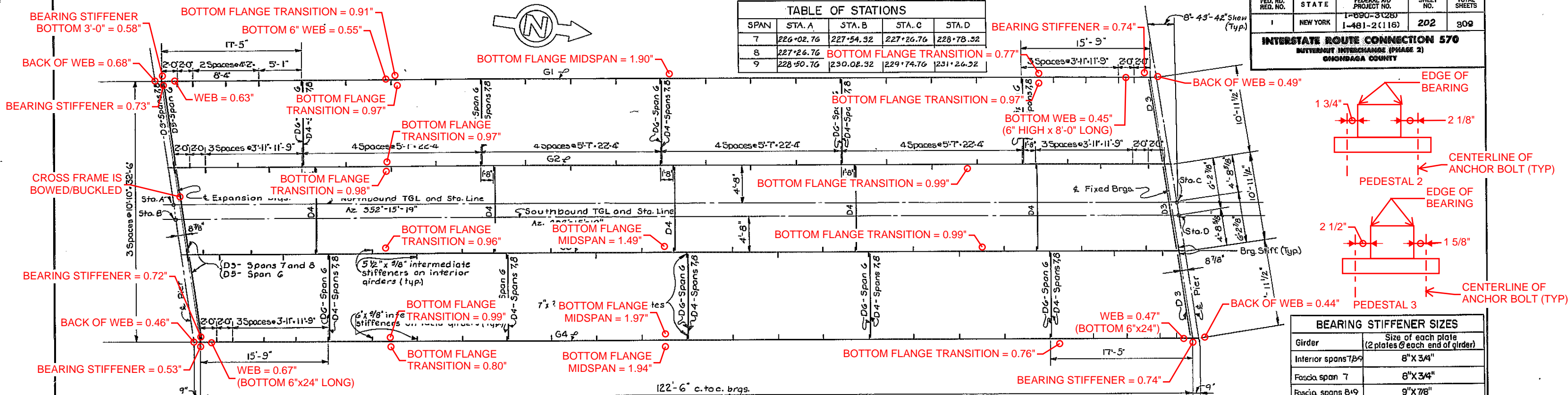
PROJECT ENGINEER: R. PARKER
IN CHARGE OF: J. R. SHERMAN
DESIGNED BY: S. R. R. R.
DESIGN CHECKED BY: M. T. R. R.
DETAILED BY: J. R. D. R. R.
DETAIL CHECKED BY: D. H. R. R.

Note:
Stud shear connectors shall be 6" high
For Bearing Details see Drawing #42 and #43
For Joint Details see Drawing #31
For Trough Details see Drawing #39

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS
SPAN 6 NORTHBOUND
BIN 1093572

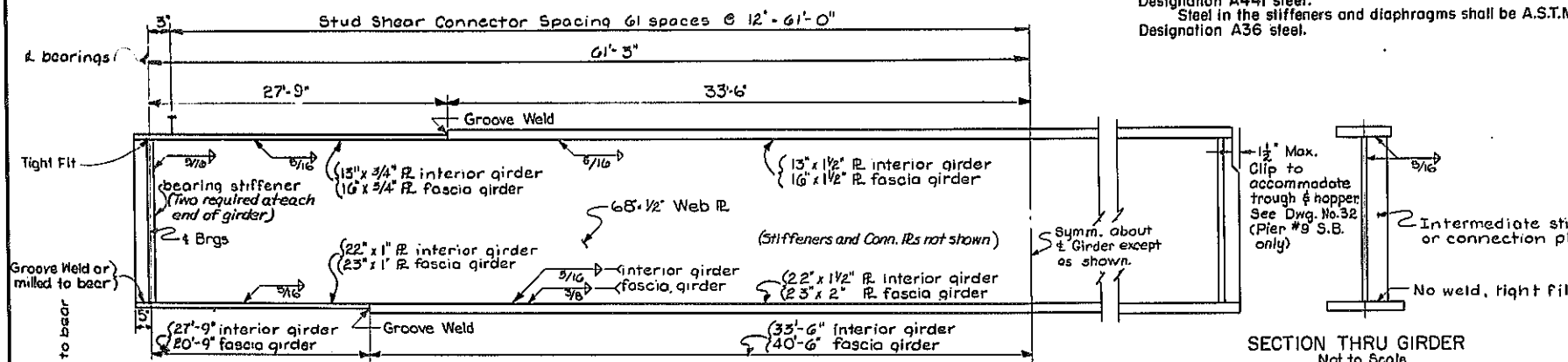
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	1-690-3(28)	202	309

INTERSTATE ROUTE CONNECTION 570 NIGHTMARE INTERCHANGE (PHASE 2) CHONDAGA COUNTY

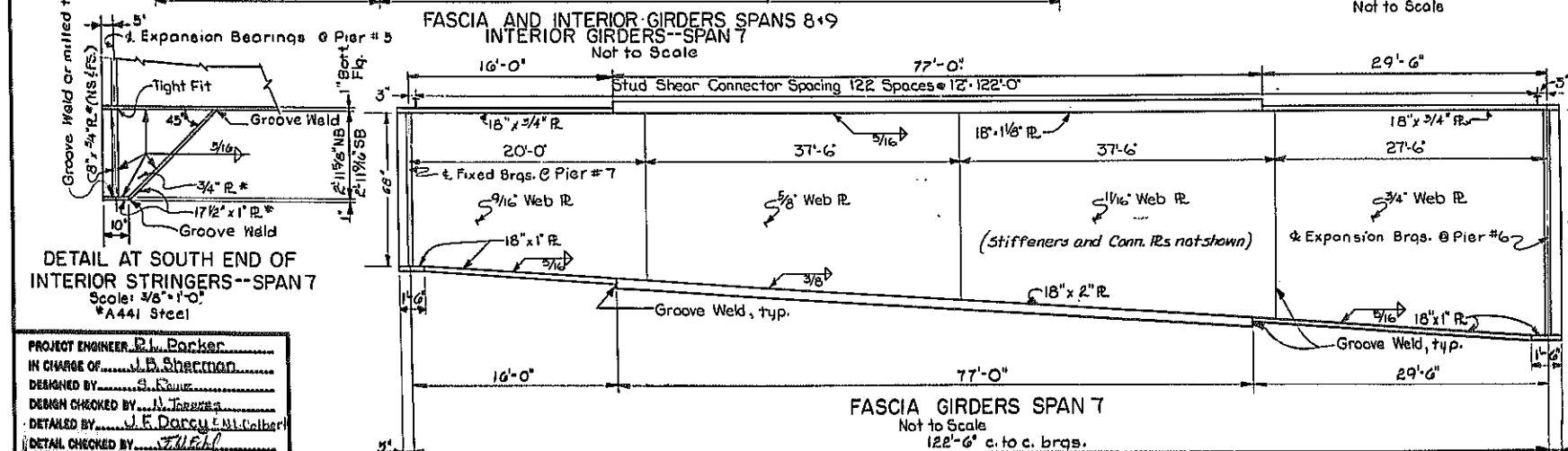


STEEL FRAMING PLAN SPANS 7, 8 & 9 (NB+SB)
Scale: 3/16" = 1'-0"

Steel in the girder webs and flanges shall be A.S.T.M. Designation A441 steel.
Steel in the stiffeners and diaphragms shall be A.S.T.M. Designation A36 steel.



SECTION THRU GIRDER
Not to Scale



FASCIA GIRDERS SPAN 7
Not to Scale
122'-6" c. to c. brgs.

BOTTOM OF SLAB ELEVATIONS

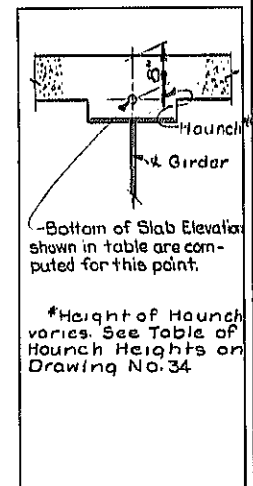
NORTHBOUND					SOUTHBOUND				
GIRDER	SPAN	EXP. BRGS.	CL. SPAN	CL. FIX. BRGS.	GIRDER	SPAN	EXP. BRGS.	CL. SPAN	CL. FIX. BRGS.
G1	7	448.60	447.95	447.22	G1	7	448.70	448.07	447.35
G2	7	448.81	448.16	447.42	G2	7	448.91	448.28	447.56
G3	7	448.77	448.11	447.37	G3	7	448.93	448.29	447.57
G4	7	448.52	447.87	447.12	G4	7	448.68	448.05	447.32
G1	8	447.20	446.37	445.45	G1	8	447.33	446.52	445.63
G2	8	447.40	446.57	445.65	G2	8	447.54	446.73	445.83
G3	8	447.35	446.52	445.59	G3	8	447.55	446.73	445.83
G4	8	447.10	446.27	445.34	G4	8	447.30	446.48	445.58
G1	9	445.43	444.42	443.55	G1	9	445.60	444.61	443.87
G2	9	445.63	444.62	443.88	G2	9	445.80	444.81	443.74
G3	9	445.57	444.86	443.46	G3	9	445.81	444.81	443.73
G4	9	445.32	444.50	443.20	G4	9	445.56	444.56	443.48

DEFLECTIONS					CAMBER		
GIRDER	SPAN	STEEL (FT)	SLAB (FT)	S.D.L. (FT)	TOTAL (FT)	V.C.C. (FT)	TOTAL (FT)
G1	7	.05	.09	.06	.20	.04	.24
G2	7	.08	.24	.03	.35	.04	.39
G3	7	.08	.24	.03	.35	.04	.39
G4	7	.05	.09	.06	.20	.04	.24
G1	8	.07	.12	.08	.27	.04	.31
G2	8	.08	.24	.03	.35	.04	.39
G3	8	.08	.24	.03	.35	.04	.39
G4	8	.07	.12	.08	.27	.04	.31
G1	9	.07	.12	.08	.27	.02	.29
G2	9	.08	.24	.03	.35	.03	.38
G3	9	.08	.24	.03	.35	.04	.39
G4	9	.07	.12	.08	.27	.04	.31
G1	9	.07	.12	.08	.27	-.06	.21
G2	9	.08	.24	.03	.35	.01	.36
G3	9	.08	.24	.03	.35	.04	.39
G4	9	.07	.12	.08	.27	.04	.31

V.C.C.=Vertical Curve Camber
S.D.L.=Superimposed dead load, includes the weight of sidewalk & railing.

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS
SPAN 7 NORTHBOUND
BIN 1093572

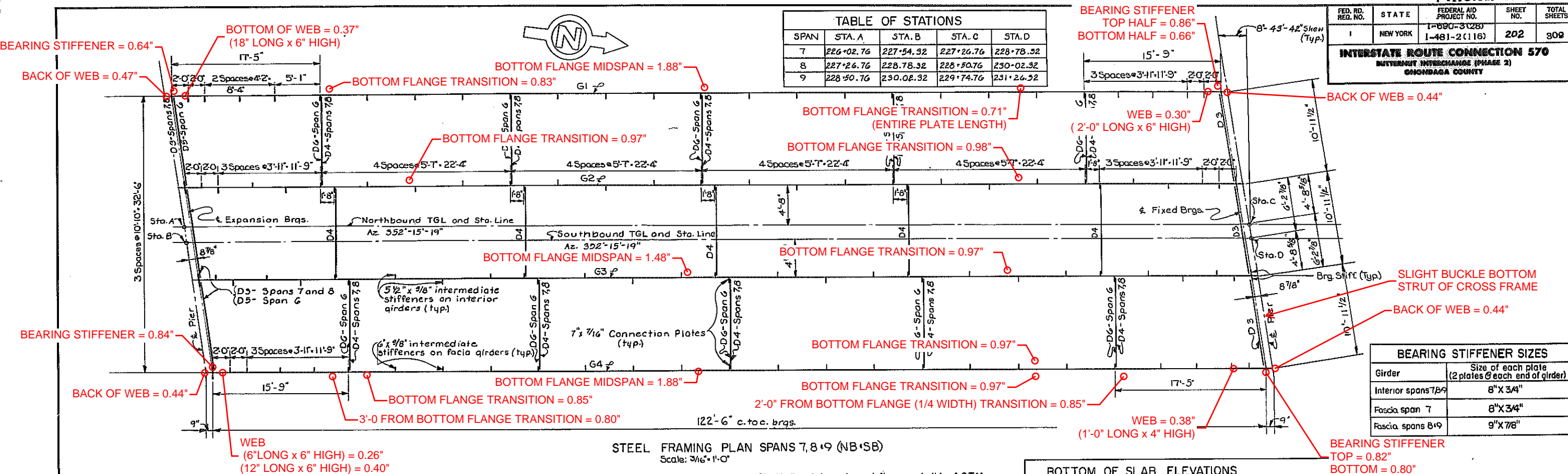
PROJECT ENGINEER: R. J. Barker
IN CHARGE OF: J. D. Sherman
DESIGNED BY: J. D. Sherman
DESIGN CHECKED BY: J. D. Sherman
DETAILED BY: J. D. Sherman
DETAIL CHECKED BY: J. D. Sherman



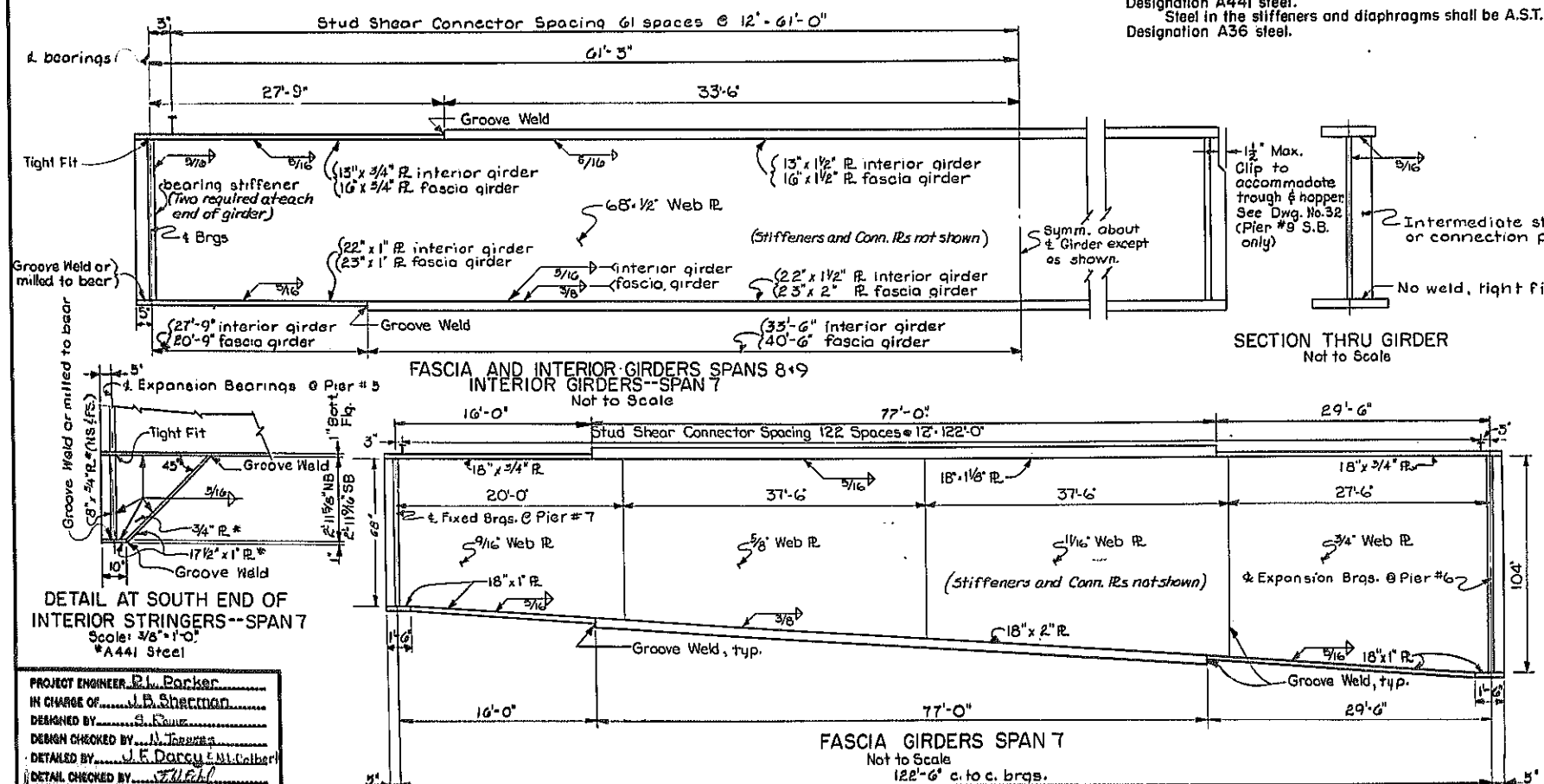
*Height of Haunch varies. See Table of Haunch Heights on Drawing No. 34.

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	1-690-3(28)	202	309
INTERSTATE ROUTE CONNECTION 570				
NUTTING INTERCHANGE (PHASE 2)				
CHONDAGA COUNTY				

TABLE OF STATIONS				
SPAN	STA. A	STA. B	STA. C	STA. D
7	226+02.76	227+54.32	227+26.76	228+78.32
8	227+26.76	228+78.32	228+50.76	230+02.32
9	228+50.76	230+02.32	229+74.76	231+26.32



BEARING STIFFENER SIZES	
Girder	Size of each plate (2 plates @ each end of girder)
Interior spans 7 & 8	8" x 3/4"
Fascia span 7	8" x 3/4"
Fascia spans 8 & 9	9" x 7/8"

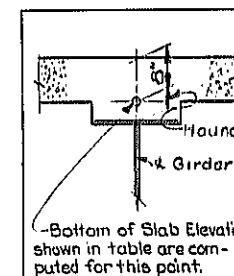


BOTTOM OF SLAB ELEVATIONS							
NORTHBOUND				SOUTHBOUND			
GIRDER	SPAN	EXP. BRGS.	FIX. BRGS.	GIRDER	SPAN	EXP. BRGS.	FIX. BRGS.
G1	7	448.60	447.95	G1	7	448.70	448.07
G2	7	448.81	448.16	G2	7	448.91	448.28
G3	7	448.77	448.11	G3	7	448.93	448.29
G4	7	448.52	447.87	G4	7	448.68	448.05
G1	8	447.20	446.37	G1	8	447.33	446.52
G2	8	447.40	446.57	G2	8	447.54	446.73
G3	8	447.35	446.52	G3	8	447.55	446.73
G4	8	447.10	446.27	G4	8	447.30	446.48
G1	9	445.43	444.42	G1	9	445.60	444.61
G2	9	445.63	444.62	G2	9	445.80	444.81
G3	9	445.57	444.56	G3	9	445.81	444.81
G4	9	445.32	444.50	G4	9	445.56	444.56

DEFLECTIONS						CAMBER	
GIRDER	SPAN	STEEL (FT)	SLAB (FT)	S.D.L. (FT)	TOTAL (FT)	V.C.C. (FT)	TOTAL (FT)
G1	7	.05	.09	.06	.20	.04	.24
G2	7	.08	.24	.03	.35	.04	.39
G3	7	.08	.24	.03	.35	.04	.39
G4	7	.05	.09	.06	.20	.04	.24
G1	8	.07	.12	.08	.27	.04	.31
G2	8	.08	.24	.03	.35	.04	.39
G3	8	.08	.24	.03	.35	.04	.39
G4	8	.07	.12	.08	.27	.04	.31
G1	9	.07	.12	.08	.27	.02	.29
G2	9	.08	.24	.03	.35	.03	.38
G3	9	.08	.24	.03	.35	.04	.39
G4	9	.07	.12	.08	.27	.04	.31
G1	9	.07	.12	.08	.27	-.06	.21
G2	9	.08	.24	.03	.35	.01	.36
G3	9	.08	.24	.03	.35	.04	.39
G4	9	.07	.12	.08	.27	.04	.31

V.C.C.=Vertical Curve Camber
 S.D.L.=Superimposed dead load, includes the weight of sidewalk & railing.

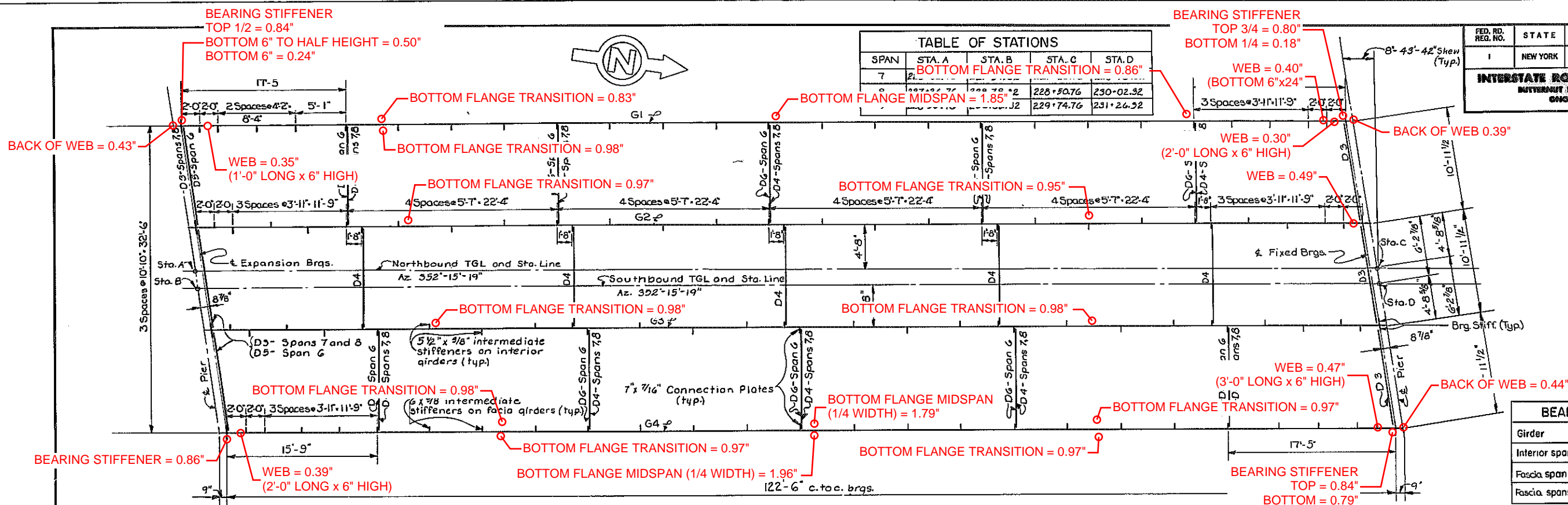
BRIDGE NO. 2
 INTERSTATE ROUTE 481 OVER DEWITT YARDS
SPAN 8 NORTHBOUND
BIN 1093572



*Height of Haunch varies. See Table of Haunch Heights on Drawing No. 34.

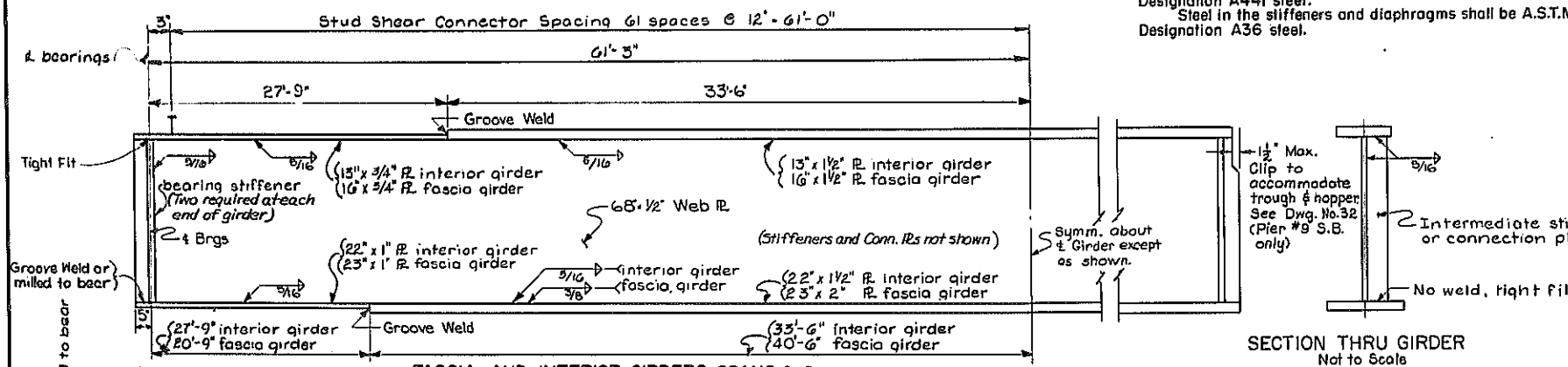
B. #2 Detail Yds. Steel Frame

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	1-690-3(26)	202	309
INTERSTATE ROUTE CONNECTION 570				
NORTHBOUND INTERCHANGE (PHASE 2)				
CHONDAGA COUNTY				

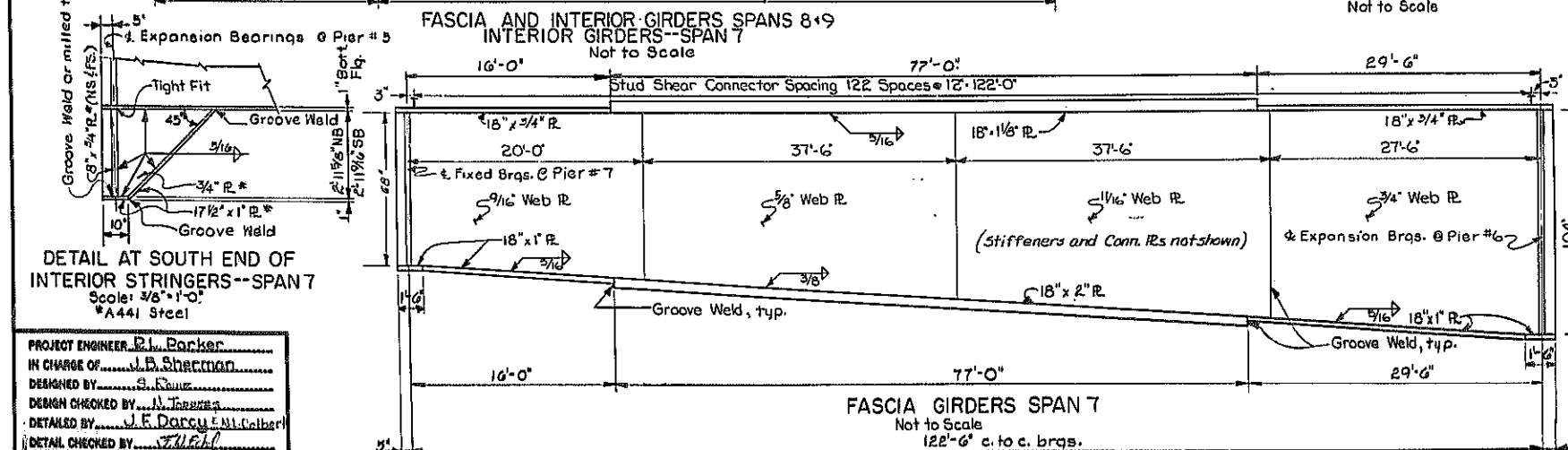


STEEL FRAMING PLAN SPANS 7, 8 & 9 (NB+SB)
Scale: 3/16" = 1'-0"

Steel in the girder webs and flanges shall be A.S.T.M. Designation A441 steel.
Steel in the stiffeners and diaphragms shall be A.S.T.M. Designation A36 steel.



SECTION THRU GIRDER
Not to Scale



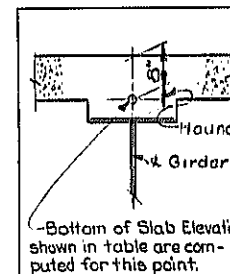
FASCIA GIRDERS SPAN 7
Not to Scale
122'-6\"/>

BOTTOM OF SLAB ELEVATIONS									
NORTHBOUND					SOUTHBOUND				
GIRDER	SPAN	EXP. BRGS.	CL. SPAN	CL. FIX. BRGS.	GIRDER	SPAN	EXP. BRGS.	CL. SPAN	CL. FIX. BRGS.
G1	7	448.60	447.95	447.22	G1	7	448.70	448.07	447.35
G2	7	448.81	448.16	447.42	G2	7	448.91	448.28	447.56
G3	7	448.77	448.11	447.37	G3	7	448.93	448.29	447.57
G4	7	448.52	447.87	447.12	G4	7	448.68	448.05	447.32
G1	8	447.20	446.37	445.45	G1	8	447.33	446.52	445.63
G2	8	447.40	446.57	445.65	G2	8	447.54	446.73	445.83
G3	8	447.35	446.52	445.59	G3	8	447.55	446.73	445.83
G4	8	447.10	446.27	445.34	G4	8	447.30	446.48	445.58
G1	9	445.43	444.42	443.53	G1	9	445.60	444.61	443.87
G2	9	445.63	444.62	443.88	G2	9	445.80	444.81	443.74
G3	9	445.57	444.86	443.46	G3	9	445.81	444.81	443.73
G4	9	445.32	444.50	443.20	G4	9	445.56	444.56	443.48

DEFLECTIONS						CAMBER	
GIRDER	SPAN	STEEL (FT.)	SLAB (FT.)	S.D.L. (FT.)	TOTAL (FT.)	V.C.C. (FT.)	TOTAL (FT.)
G1	7	.05	.09	.06	.20	.04	.24
G2	7	.08	.24	.03	.35	.04	.39
G3	7	.08	.24	.03	.35	.04	.39
G4	7	.05	.09	.06	.20	.04	.24
G1	8	.07	.12	.08	.27	.04	.31
G2	8	.08	.24	.03	.35	.04	.39
G3	8	.08	.24	.03	.35	.04	.39
G4	8	.07	.12	.08	.27	.04	.31
G1	9	.07	.12	.08	.27	.02	.29
G2	9	.08	.24	.03	.35	.03	.38
G3	9	.08	.24	.03	.35	.04	.39
G4	9	.07	.12	.08	.27	.04	.31
G1	9	.07	.12	.08	.27	-.06	.21
G2	9	.08	.24	.03	.35	.01	.36
G3	9	.08	.24	.03	.35	.04	.39
G4	9	.07	.12	.08	.27	.04	.31

V.C.C.=Vertical Curve Camber
S.D.L.=Superimposed dead load, includes the weight of sidewalk & railing.

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS
SPAN 9 NORTHBOUND
BIN 1093572

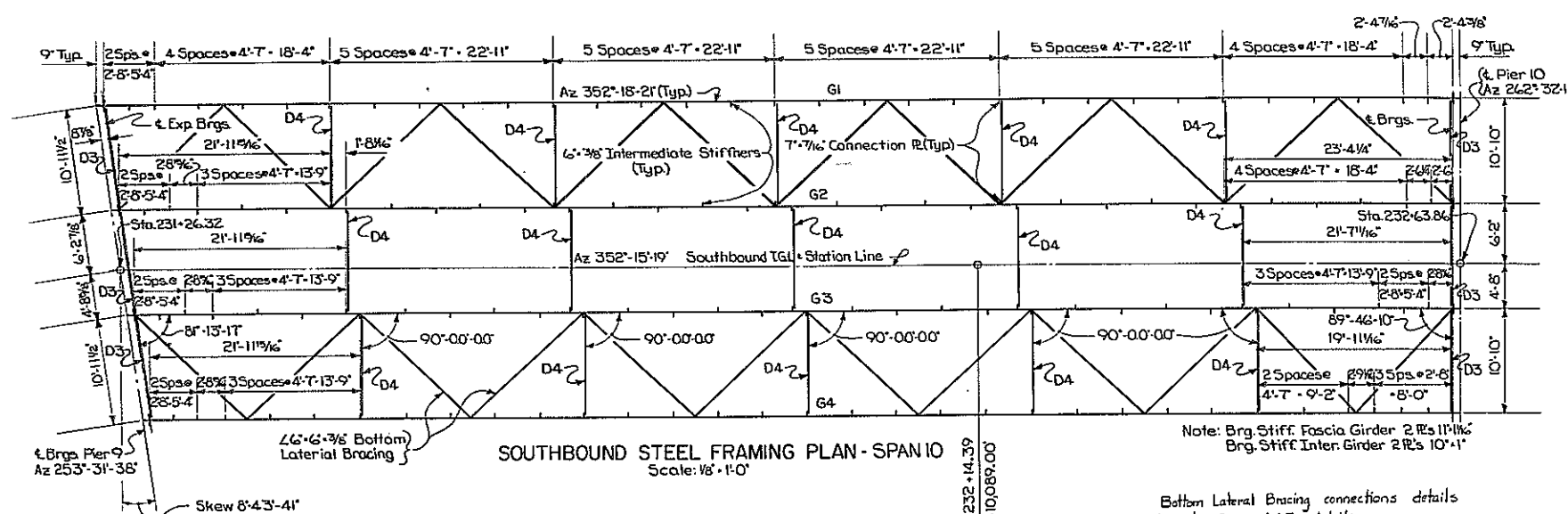


*Height of Haunch varies. See Table of Haunch Heights on Drawing No. 34.

PROJECT ENGINEER: R. J. Barker
IN CHARGE OF: J. D. Sherman
DESIGNED BY: J. D. Sherman
DESIGN CHECKED BY: J. D. Sherman
DETAILED BY: J. D. Sherman
DETAIL CHECKED BY: J. D. Sherman

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	1-690-3(28) 1-481-2(116)	204	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
CHENANGO COUNTY



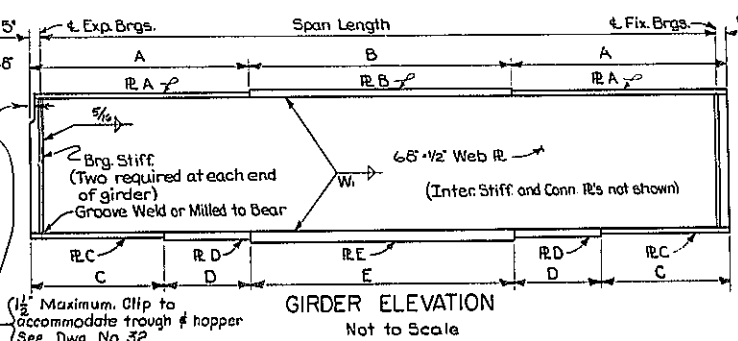
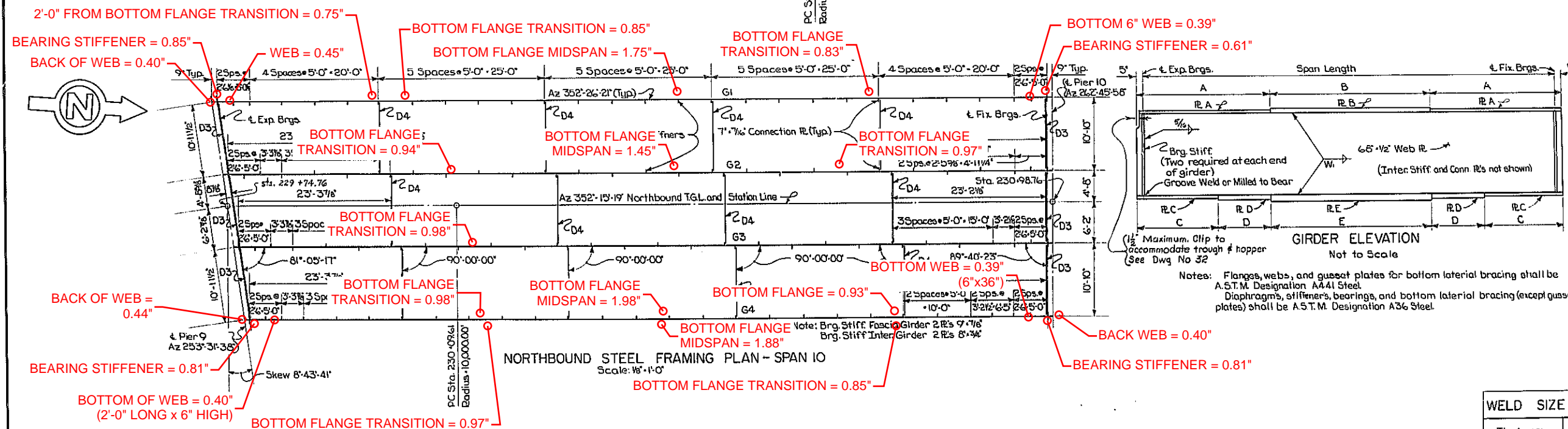
BOTTOM OF SLAB ELEVATIONS

SOUTHBOUND				
GIRDER	SPAN	EXP. BRGS.	CL. SPAN	CL. FIX. BRGS.
G1	10	443.54	442.46	441.26
G2	10	443.72	442.49	441.15
G3	10	443.70	442.40	440.99
G4	10	443.45	442.16	440.77

NORTHBOUND				
GIRDER	SPAN	EXP. BRGS.	CL. SPAN	CL. FIX. BRGS.
G1	10	443.50	442.49	441.39
G2	10	443.56	442.42	441.19
G3	10	443.43	442.24	440.98
G4	10	443.17	442.00	440.75

Height of Haunch varies see Table of Haunch Heights (Drawing No. 34)

Bottom of slab elevations shown in table are computed for this point.

TYPICAL SECTION
Not to Scale

Notes: Flanges, webs, and gusset plates for bottom lateral bracing shall be A.S.T.M. Designation A441 Steel.
Diaphragms, stiffeners, bearings, and bottom lateral bracing (except gusset plates) shall be A.S.T.M. Designation A36 Steel.

SPAN IO GIRDER TABLE

GIRDER	SPAN LENGTH CL. TO CL. BRGS.	FLANGE PLATE SIZES					FLANGE PLATE LENGTHS					DEFLECTIONS (FT)				CAMBER		STUD SHEAR CONNECTOR SPACING		
		R A	R B	R C	R D	R E	A	B	C	D	E	STEEL	CONC.	S. D. L.	TOTAL	V.C.C.(FT.)	TOTAL			
Southbound	G1	138'-8 3/4"	23"x1"	23"x1 1/2"	24"x1"	24"x2"	24"x2 1/2"	36'-9 7/8"	66'-0"	20'-3 3/4"	19'-0"	61'-0"	0.10	0.15	0.11	0.36	0.6	0.42'	5'	138 Spaces • 12" • 138'-0"
	G2	137'-0 3/4"	19"x1"	19"x1 1/2"	24"x1"	None	24"x2"	32'-11 1/8"	72'-0"	23'-5 1/4"	0	91'-0"	0.11	0.28	0.04	0.43	0.6	0.49	5 7/8"	137 Spaces • 12" • 137'-0"
	G3	135'-3 3/4"	19"x1"	19"x1 1/2"	24"x1"	None	24"x2"	32'-0 9/16"	72'-0"	22'-6 3/4"	0	91'-0"	0.10	0.27	0.04	0.41	0.6	0.46	5 1/2"	135 Spaces • 12" • 135'-0"
	G4	133'-7"	23"x1"	23"x1 1/2"	24"x1"	24"x2"	24"x2 1/2"	34'-2 1/2"	66'-0"	17'-8 1/2"	19'-0"	61'-0"	0.09	0.13	0.09	0.31	0.6	0.36	4 3/8"	133 Spaces • 12" • 133'-0"
Northbound	G1	125'-0 1/4"	17"x3/4"	17"x1 1/2"	24"x1"	None	24"x2"	28'-11 1/8"	68'-0"	21'-5 1/8"	0	83'-0"	0.07	0.12	0.09	0.28	0.6	0.33	4"	125 Spaces • 12" • 125'-0"
	G2	123'-3 1/8"	14"x3/4"	14"x1 1/2"	23"x1"	None	23"x1 1/2"	27'-6 1/8"	69'-0"	20'-0 9/16"	0	68'-0"	0.08	0.24	0.03	0.35	0.6	0.40	4 3/4"	123 Spaces • 12" • 123'-0"
	G3	121'-6"	14"x3/4"	14"x1 1/2"	23"x1"	None	23"x1 1/2"	26'-8"	69'-0"	21'-2"	0	68'-0"	0.07	0.23	0.03	0.33	0.6	0.37	4 1/2"	121 Spaces • 12" • 121'-0"
	G4	119'-8 1/8"	17"x3/4"	17"x1 1/2"	24"x1"	None	24"x2"	26'-3 3/4"	68'-0"	18'-9 1/8"	0	83'-0"	0.06	0.10	0.08	0.24	0.6	0.28	3 3/8"	119 Spaces • 12" • 119'-0"

S.D.L. = superimposed dead load, includes weight of railing and parapet.

V.C.C. = vertical curve correction

WELD SIZE TABLE

Thickness of Flange	W. Size of fillet weld joining web to flange
1/2" and under	5/16"
over 1/2" to 2 1/4"	3/8"
over 2 1/4"	1/2"

PROJECT ENGINEER B.L. Parker
IN CHARGE OF E. Eckel
DESIGNED BY E. Eckel
DESIGN CHECKED BY James A. Smith
DETAILED BY J.F. Darcy
DETAIL CHECKED BY J.F. Darcy

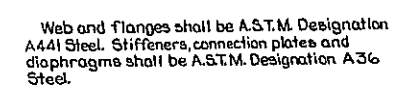
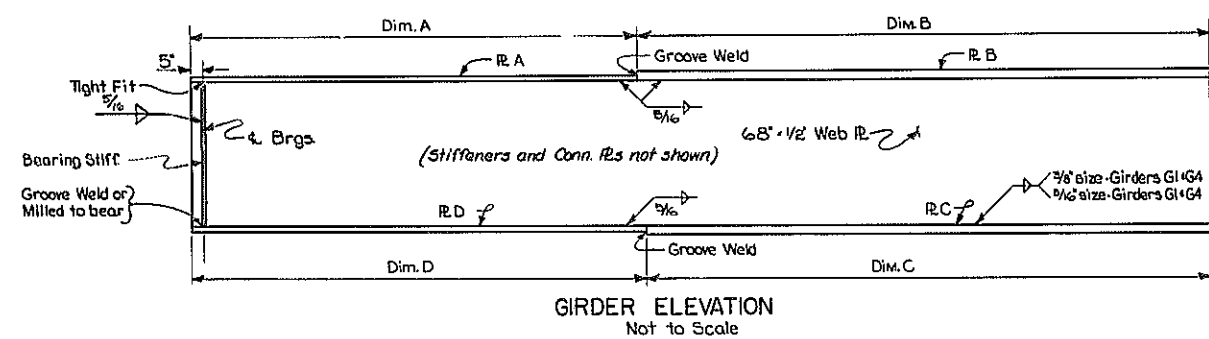
BRIDGE NO. 2

INTERSTATE ROUTE 481 OVER DEWITT YARDS

SPAN IO NORTHBOUND

BIN 1093572

TABLE OF AZIMUTHS	
LOCATION	AZIMUTH
£ Pier * 10 N.B.	262°-45'-57"
£ Pier * 11 N.B.	263°-28'-36"
£ Pier * 12 N.B.	264°-11'-13"
£ Pier * 13 N.B.	264°-53'-58"
£ Pier * 14 N.B.	265°-36'-28"
£ Fixed Bearings • North Abutment N.B.	266°-19'-06"
£ girders, Span 11 N.B.	353°-07'-17"
£ girders, Span 12 N.B.	353°-49'-55"
£ girders, Span 13 N.B.	354°-32'-32"
£ girders, Span 14 N.B.	355°-15'-10"
£ girders, Span 15 N.B.	355°-57'-47"



Bottom of Slab
Elevations shown in table
are computed for this point.

SPAN		GIRDER	DEFLECTIONS (FT.)				CAMBER	
			STEEL	SLAB	S.D.L.	TOTAL	V.C.C. (FT.)	TOTAL FT. IN.
Spans 11,12,13 Northbound	G1*G4	.07	.12	.08	.27	.04	.31	3 9/16"
	G2*G3	.08	.24	.03	.35	.04	.39	4 5/8"
Span 14 Northbound	G1*G4	.07	.12	.08	.27	-.04	.23	2 3/4"
	G2*G3	.08	.24	.03	.35	-.04	.31	3 9/16"
Span 15 Northbound	G1*G4	.07	.12	.08	.27	-.07	.20	2 1/8"
	G2*G3	.08	.24	.03	.35	-.07	.28	3 5/8"
V.C.C. - Vertical Curve Camber S.D.L. (Superimposed Dead Load) - Includes weight of parapet railing.								

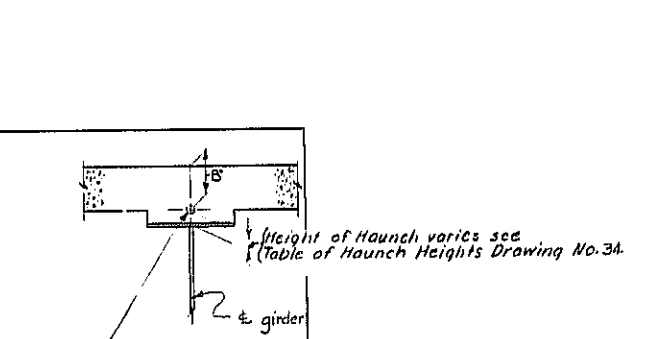
TABLE OF STATIONS						
SPAN	STATION A		STATION B		STATION C	
	STATION	C	STATION	C	STATION	C
11WB	230+93.76	4.Pier+10NB	232+22.76	4.Pier+11NB		
12WB	232+22.76	4.Pier+11NB	233+46.76	4.Pier+12NB		
13WB	233+46.76	4.Pier+12NB	234+70.76	4.Pier+13NB		
14WB	234+70.76	4.Pier+13NB	235+94.76	4.Pier+14NB		
15WB	235+94.76	4.Pier+14NB			237+18.01	4.Fix Bgs NAD

PROJECT ENGINEER R. L. Parker
IN CHARGE OF J. B. Sherman
DESIGNED BY N. Topper
DESIGN CHECKED BY D. Smith
DETAILED BY J. F. Darcy
DETAIL CHECKED BY F. W. Galt

BRIDGE NO. 2
INTERSTATE ROUTE 491 OVER DENWITT YARDS
SPAN 11 NORTHBOUND
BIN 1093572

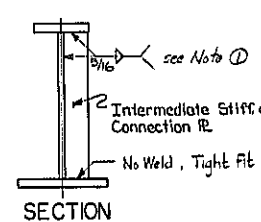
DISCONTINUED

BACK OF WEB
TOP 1/3 = 0.46"
BOTTOM 1/3 = 0.32"



BRIDGE NO. 2
INTERSTATE ROUTE 491 OVER DEWITT YARDS
SPAN 12 NORTHBOUND
BIN 1093572

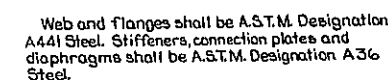
LOCATION	AZIMUTH
£ Pier *10 N.B.	262°-45'-57"
£ Pier *11 N.B.	263°-28'-36"
£ Pier *12 N.B.	264°-11'-13"
£ Pier *13 N.B.	264°-53'-58"
£ Pier *14 N.B.	265°-36'-28"
£ Fixed Bearings • North Abutment N.B.	266°-19'-06"
£ girders, Span 11 N.B.	353°-07'-17"
£ girders, Span 12 N.B.	353°-49'-55"
£ girders, Span 13 N.B.	354°-32'-32"
£ girders, Span 14 N.B.	355°-15'-10"
£ girders, Span 15 N.B.	355°-57'-47"



Height of Haunch varies see
(Table of Haunch Heights Drawing No. 34)

Bottom of Slab

Elevations shown in table
are computed for this point.



Note ①: Where connection plates are used in pairs, the fillet weld at top of stiffener is optional. See Note "Sup 4" in the Superstructure Notes.

		DEFLECTIONS (FT.)				CAMBER	
SPAN	GIRDER	STEEL	SLAB	S.D.L.	TOTAL	V.C.C. (FT.)	TOTAL FT. IN.
Spans 11,12 & 13 Northbound	G1 & G4	.07	.12	.08	.27	.04	31 3%
	G2 & G3	.08	.24	.03	.35	.04	39 4%
Span 14 Northbound	G1 & G4	.07	.12	.08	.27	-.04	23 2%
	G2 & G3	.08	.24	.03	.35	-.04	31 3%
Span 15 Northbound	G1 & G4	.07	.12	.08	.27	-.07	20 2%
	G2 & G3	.08	.24	.03	.35	-.07	28 3%

V.C.C. = Vertical Curve Camber
S.D.L. (Superimposed Dead Load) - Includes weight of parapet & railing.

SPAN	STATION A		STATION B		STATION C	
	STATION	C	STATION	C	STATION	C
11(NB)	250+98.76	4.Pier*10(NB)	232+22.76	4.Pier*11(NB)		
12(NB)	232+22.76	4.Pier*11(NB)	233+44.76	4.Pier*12(NB)		
13(NB)	233+44.76	4.Pier*12(NB)	234+70.76	4.Pier*13(NB)		
14(NB)	234+70.76	4.Pier*13(NB)	235+94.76	4.Pier*14(NB)		
15(NB)	235+94.76	4.Pier*14(NB)			237+16.01	4.Fit.Bug NA

PROJECT ENGINEER R. L. Parker
IN CHARGE OF J. B. Sherman
DESIGNED BY N. Tappes
DESIGN CHECKED BY D. Smith
DETAILED BY J. F. Darcy
DETAIL CHECKED BY J. F. Darcy

SPAN 13 NORTHBOUND
BIN 1093572

TABLE OF AZIMUTHS	
LOCATION	AZIMUTH
£ Pier * 10 N.B.	262°-45'-57"
£ Pier * 11 N.B.	263°-28'-36"
£ Pier * 12 N.B.	264°-11'-13"
£ Pier * 13 N.B.	264°-53'-58"
£ Pier * 14 N.B.	265°-36'-28"
£ Fixed Bearings • North Abutment N.B.	266°-19'-06"
£ girders, Span 11 N.B.	353°-07'-17"
£ girders, Span 12 N.B.	353°-49'-55"
£ girders, Span 13 N.B.	354°-32'-32"
£ girders, Span 14 N.B.	355°-15'-10"
£ girders, Span 15 N.B.	355°-57'-47"

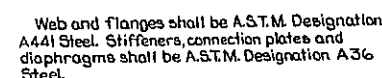


Diagram illustrating the elevation of a haunch on a girder. The diagram shows a cross-section of a girder with a haunch. The height of the haunch is indicated by a dimension line labeled "Height of Haunch varies see Table of Haunch Heights Drawing No. 3". The width of the haunch is indicated by a dimension line labeled "B". The bottom of the slab is indicated by a horizontal line labeled "Bottom of Slab". The elevation of the girder is indicated by a horizontal line labeled "± girder".

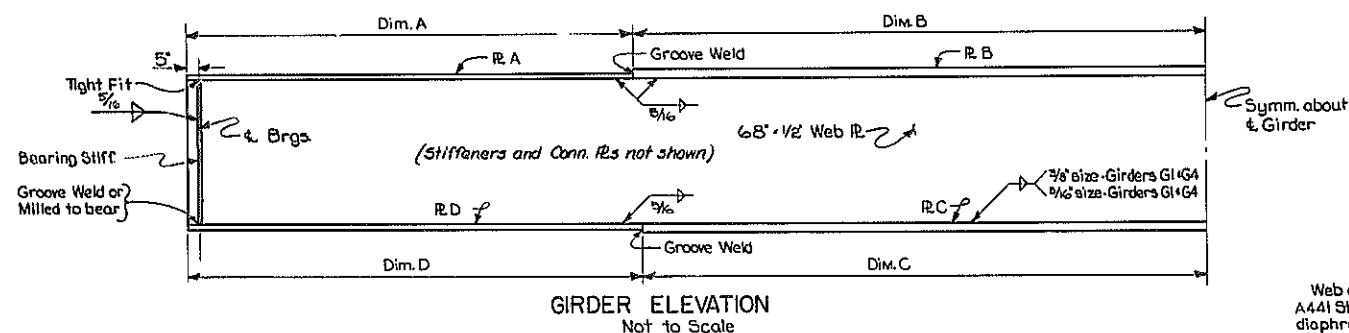
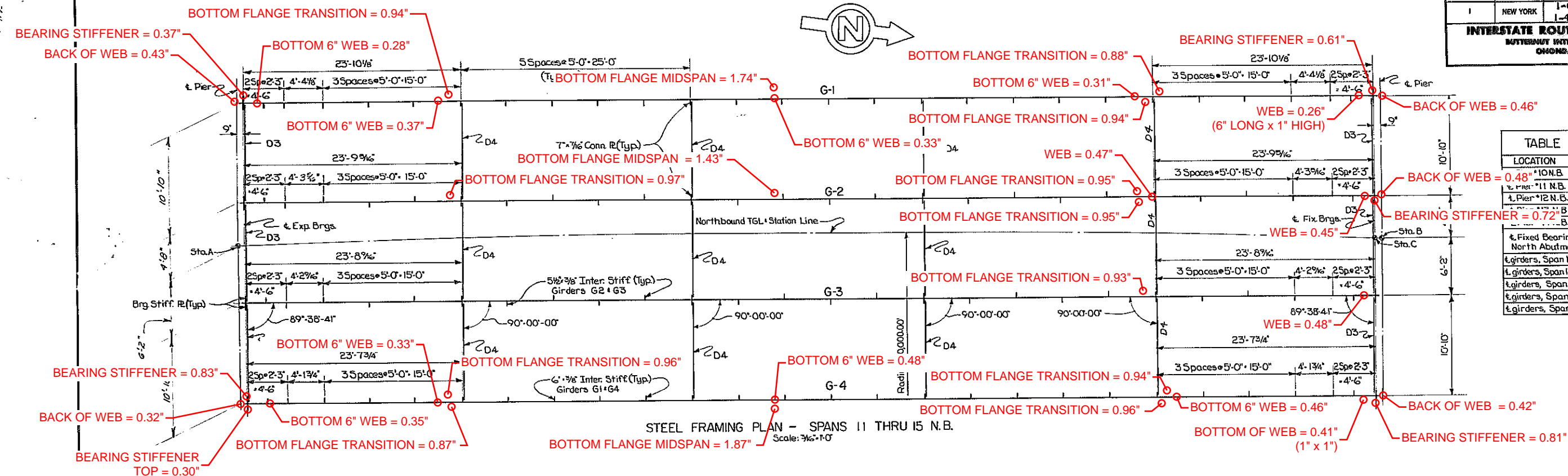
Elevations shown in table computed for this point.

SPAN	STATION A		STATION B		STATION C	
	STATION	C	STATION	C	STATION	C
11(NB)	250+98.76	4.Pier*10(NB)	232+22.76	4.Pier*11(NB)		
12(NB)	232+22.76	4.Pier*11(NB)	233+44.76	4.Pier*12(NB)		
13(NB)	233+44.76	4.Pier*12(NB)	234+70.76	4.Pier*13(NB)		
14(NB)	234+70.76	4.Pier*13(NB)	235+94.76	4.Pier*14(NB)		
15(NB)	235+94.76	4.Pier*14(NB)			237+16.01	4.Fit.Bug NA

BIN 1093572

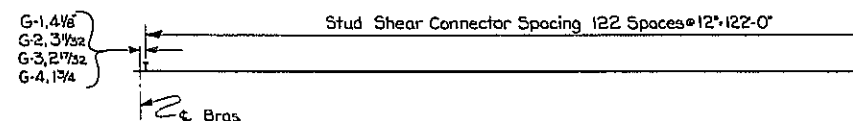
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	1-690-3(28) 1-481-2(116)	206	309
INTERSTATE ROUTE CONNECTION 570 BUTTERNUT INTERCHANGE (PHASE 2) ONONDAGA COUNTY				

TABLE OF AZIMUTHS	
LOCATION	AZIMUTH
Center P11 N.B.	262°-45'-51"
Center P12 N.B.	263°-28'-36"
Center P13 N.B.	264°-11'-13"
Center P14 N.B.	264°-53'-51"
Center P15 N.B.	265°-36'-28"
Fixed Bearings - North Abutment N.B.	266°-19'-06"
Girders, Span 11 N.B.	353°-07'-17"
Girders, Span 12 N.B.	353°-49'-55"
Girders, Span 13 N.B.	354°-32'-32"
Girders, Span 14 N.B.	355°-15'-10"
Girders, Span 15 N.B.	355°-57'-47"



Web and Flanges shall be A.S.T.M. Designation A441 Steel. Stiffeners, connection plates and diaphragms shall be A.S.T.M. Designation A36 Steel.

Note D: Where connection plates are used in pairs, the fillet weld at top of stiffener is optional. See Note "Sup 4" in the Superstructure Notes.



NORTHBOUND GIRDER TABLE - SPANS 10 THRU 14

GIRDER	SPAN LENGTH C. TO C. BEARINGS	FLANGE SIZE				FLANGE DIMENSIONS				BEARING STIFF. 2 R's Required at each end of girder	INTERMEDIATE STIFFENER SIZE
		R A	R B	R C	R D	A	B	C	D		
G1	122'-8 1/2"	16" x 3/4"	16" x 1/2"	23" x 2"	23" x 1"	23" x 3/8"	33" x 6"	40" x 6"	21" x 3/8"	9" x 7/8"	6" x 3/8"
G2	122'-6 1/2"	13" x 3/4"	13" x 1/2"	22" x 1 1/2"	22" x 1"	28" x 2 1/2"	33" x 6"	33" x 6"	28" x 2 1/2"	8" x 3/4"	5 1/2" x 3/8"
G3	122'-5 1/2"	13" x 3/4"	13" x 1/2"	22" x 1 1/2"	22" x 1"	28" x 1 1/2"	33" x 6"	33" x 6"	28" x 1 1/2"	8" x 3/4"	5 1/2" x 3/8"
G4	122'-3 1/2"	16" x 3/4"	16" x 1/2"	23" x 2"	23" x 1"	28" x 0 1/2"	33" x 6"	40" x 6"	21" x 0 1/2"	9" x 7/8"	6" x 3/8"

SPAN	GIRDER	DEFLECTIONS (FT.)				CAMBER	
		STEEL	SLAB	S.D.L.	TOTAL	V.C.C. (FT.)	TOTAL IN.
Spans 11, 12 & 13 Northbound	G1 & G4	.07	.12	.08	.27	.04	3 1/4"
	G2 & G3	.08	.24	.03	.35	.04	4 1/8"
Span 14 Northbound	G1 & G4	.07	.12	.08	.27	.04	2 3/4"
	G2 & G3	.08	.24	.03	.35	.04	3 1/4"
Span 15 Northbound	G1 & G4	.07	.12	.08	.27	.07	2 1/2"
	G2 & G3	.08	.24	.03	.35	.07	2 3/8"

V.C.C. - Vertical Curve Camber
S.D.L. (Superimposed Dead Load) Includes weight of parapet & railing.

BOTTOM OF SLAB ELEVATIONS

NORTHBOUND				
GIRDER	SPAN	C. TO C. BRGS.	C. SPAN	C. FIX. BRGS.
G-1	11	441.36	440.02	438.57
G-2	11	441.16	439.80	438.34
G-3	11	440.94	439.57	438.12
G-4	11	440.72	439.34	437.89
G-1	12	438.53	436.98	435.34
G-2	12	438.30	436.75	435.12
G-3	12	438.08	436.52	434.89
G-4	12	437.85	436.30	434.66
G-1	13	435.30	433.57	431.75
G-2	13	435.07	433.34	431.53
G-3	13	434.85	433.12	431.30
G-4	13	434.62	432.89	431.08
G-1	14	431.71	429.80	427.98
G-2	14	431.48	429.57	427.75
G-3	14	431.26	429.34	427.53
G-4	14	431.03	429.12	427.30
G-1	15	427.93	426.25	424.71
G-2	15	427.71	426.02	424.48
G-3	15	427.48	425.80	424.26
G-4	15	427.26	425.57	424.03

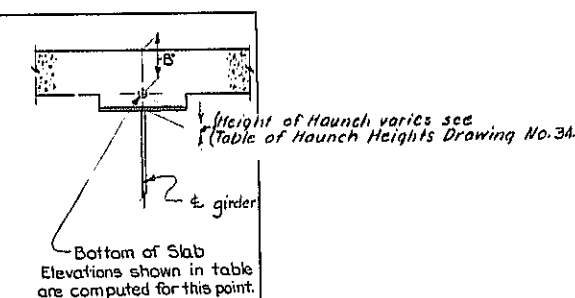


TABLE OF STATIONS

SPAN	STATION A		STATION B		STATION C	
	STATION	C.	STATION	C.	STATION	C.
11(NB)	230+98.76	1 Pier 11(NB)	232+22.76	1 Pier 11(NB)		
12(NB)	232+22.76	1 Pier 12(NB)	233+46.76	1 Pier 12(NB)		
13(NB)	233+46.76	1 Pier 13(NB)	234+70.76	1 Pier 13(NB)		
14(NB)	234+70.76	1 Pier 14(NB)	235+94.76	1 Pier 14(NB)		
15(NB)	235+94.76	1 Pier 15(NB)		237+18.01	1 Fix Brg 15(NB)	

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

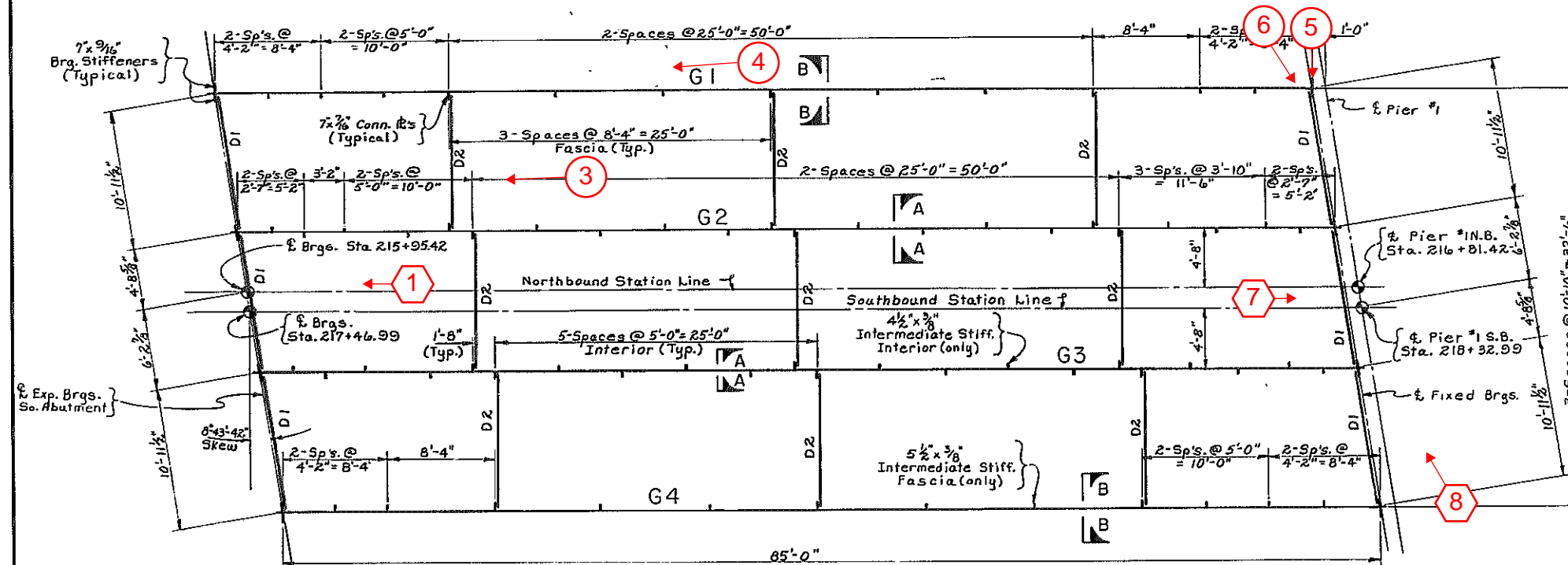
SPAN 15 NORTHBOUND

BIN 1093572

PROJECT ENGINEER: E.L. Parker
IN CHARGE OF: J.R. Sherman
DESIGNED BY: N. Tappes
DESIGN CHECKED BY: D. Smith
DETAILED BY: J.R. Darcy
DETAIL CHECKED BY: J.R. Darcy

IN-DEPTH PHOTO DOCUMENTATION

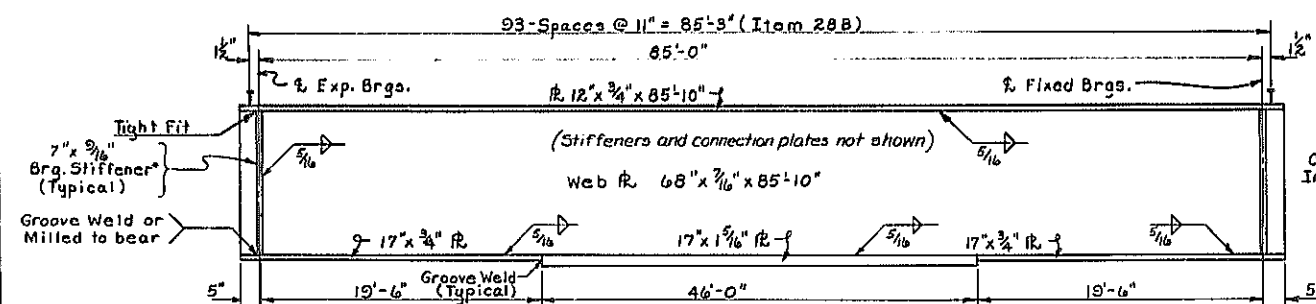
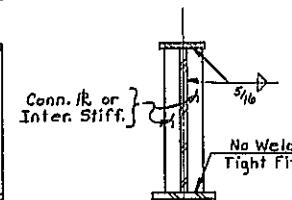
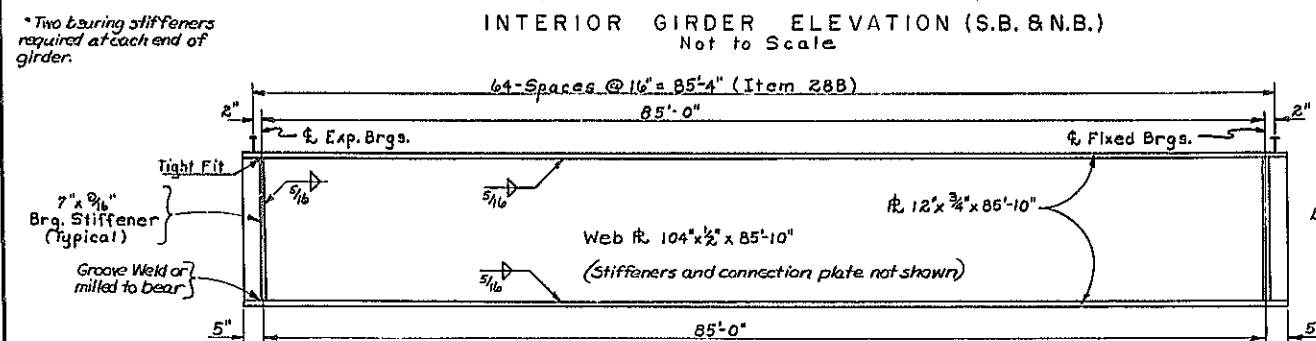
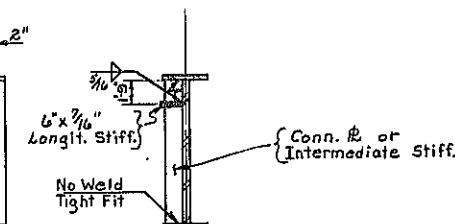
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	1-690-3(28) 1-481-2(116)	196	309
INTERSTATE ROUTE CONNECTION 570 NUTMEAT INTERCHANGE (PHASE 2) ONEIDA COUNTY				



2

see Transverse Section for Diaphragms.

STEEL LAYOUT (S.B. & N.B.)

Scale: $\frac{3}{16}'' = 1'-0''$ INTERIOR GIRDER ELEVATION (S.B. & N.B.)
Not to ScaleSECTION A-A
Not to ScaleFASCIA GIRDER ELEVATION (S.B. & N.B.)
Not to ScaleSECTION B-B
Not to Scale

Notes:

Web and flanges shall be ASTM designation A36 steel.

Stiffeners, Connection Plates, Diaphragm and Gusset Plates shall be ASTM designation A36 steel.

For Bearing Details see Drawing Nos. 42 & 43.

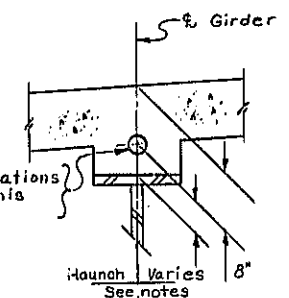
Stud Shear Connectors shall be 6\"/>

For Height of Haunch see Table of Haunch Heights Drawing No. 34.

LEGEND

SUPERSTRUCTURE PHOTOS

SUBSTRUCTURE PHOTOS



Bottom of slab elevations are computed for this point.

Haunch Varies 8\"/>

GIRDER	SPAN	THEO. BOTTOM OF SLAB ELEVATIONS			DEFLECTIONS (FT.)			CAMBER		
		% Exp. Brgs.	% Span	% Fix. Brgs.	STEEL	SLAB	S.D.L.	TOTAL	(ft.)	(in.)
G1 N.B.	1	446.55	447.12	447.65	.01	.03	.01	.05	.02	.07
G2 N.B.	1	446.80	447.40	447.90	.02	.08	.02	.12	.02	.14
G3 N.B.	1	446.79	447.36	447.89	.02	.08	.02	.12	.02	.14
G4 N.B.	1	446.59	447.16	447.68	.01	.03	.01	.05	.02	.07
G1 S.B.	1	446.34	446.92	447.46	.01	.03	.01	.05	.02	.07
G2 S.B.	1	446.59	447.17	447.71	.02	.08	.02	.12	.02	.14
G3 S.B.	1	446.64	447.22	447.76	.02	.08	.02	.12	.02	.14
G4 S.B.	1	446.44	447.02	447.55	.01	.03	.01	.05	.02	.07

V.C.C. = Vertical Curve Correction

S.D.L. = Superimposed Dead Load, includes weight of railing.

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

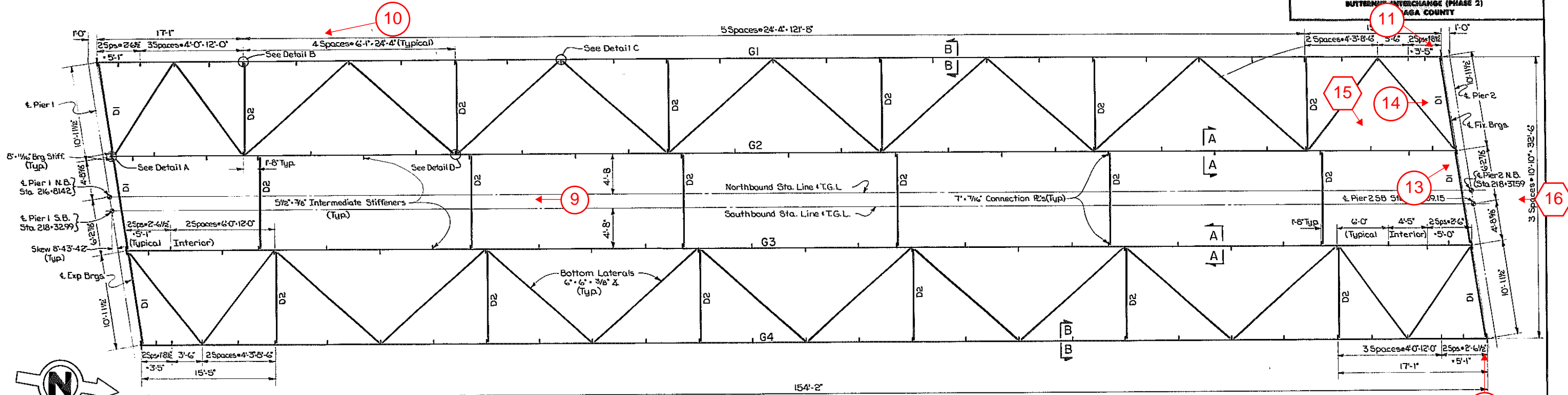
SPAN 1 NORTHBOUND

BIN 1093572

PHOTO LOCATION PLAN

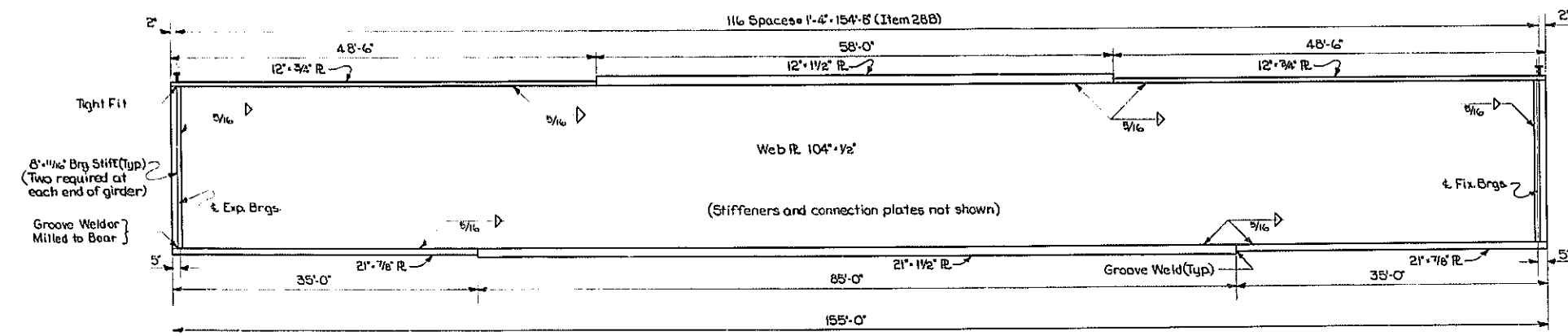
PROJECT ENGINEER R. Parker
 IN CHARGE OF E. E. E. E.
 DESIGNED BY N. TOPPES
 DESIGN CHECKED BY R. Thimble
 DETAILED BY J. C. Thompson
 DETAIL CHECKED BY H. A. Thompson

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	1-880-3(28) 1-481-2(116)	198	309
INTERSTATE ROUTE CONNECTION 570 BUTTERNUT INTERCHANGE (PHASE 2) ALBANY COUNTY				

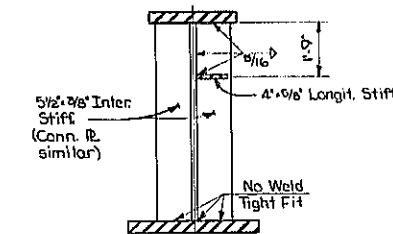


Notes: See Transverse Section for Diaphragms and Lateral Bracing.
See Drawing No. 22 for Cross Lateral Bracing Details A, B, C & D.

STEEL FRAMING PLAN NB & SB
Scale: 3/16" = 1'-0"



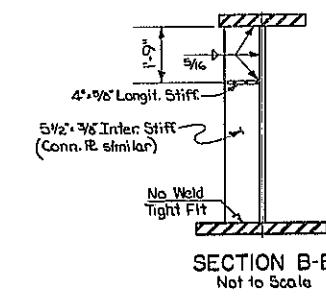
FASCIA & INTERIOR GIRDER ELEVATION NB & SB
Not to Scale



SECTION A-A
Not to Scale

Notes: Web and flanges shall be A.S.T.M. designation A441 Steel.
Stiffeners, connection plates, diaphragms, lateral bracing and gusset plates shall be A.S.T.M. designation A36 Steel.
For details of bearings see Dwg. No. 42 & 43.
Stud Shear Connectors shall be 6" high.

- LEGEND
- # SUPERSTRUCTURE PHOTOS
 - # SUBSTRUCTURE PHOTOS

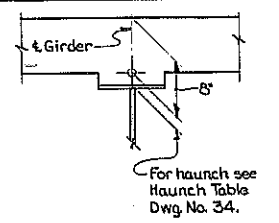


SECTION B-B
Not to Scale

BRIDGE NO. 2
INTERSTATE ROUTE 381 OVER
DEWITT YARDS
SPAN 2 NORTHBOUND
BIN 1093572 10.20 OF 50

GIRDER	SPAN	THEO. BOTTOM OF SLAB ELEVATIONS			DEFLECTIONS (FT.)			CAMBER		
		EXP. BRGS	FIX. BRGS	STEEL SLAB	SDL	TOT.	V.C.C.	TOTAL	(FT.)	(IN.)
G1 NB	2	447.67	448.52	449.23	.08	.16	.07	.31	.07	.38 4 1/2
G2 NB	2	447.92	448.76	449.47	.08	.24	.07	.39	.07	.46 5 1/2
G3 NB	2	447.91	448.75	449.45	.08	.24	.07	.39	.07	.46 5 1/2
G4 NB	2	447.70	448.54	449.24	.08	.16	.07	.31	.07	.38 4 1/2
G1 SB	2	447.48	448.35	449.08	.08	.16	.07	.31	.07	.38 4 1/2
G2 SB	2	447.73	448.60	449.32	.08	.24	.07	.39	.07	.46 5 1/2
G3 SB	2	447.78	448.65	449.37	.08	.24	.07	.39	.07	.46 5 1/2
G4 SB	2	447.58	448.44	449.16	.08	.16	.07	.31	.07	.38 4 1/2

V.C.C. - Vertical Curve Correction
S.D.L. - Superimposed Dead Load, includes weight of railing.

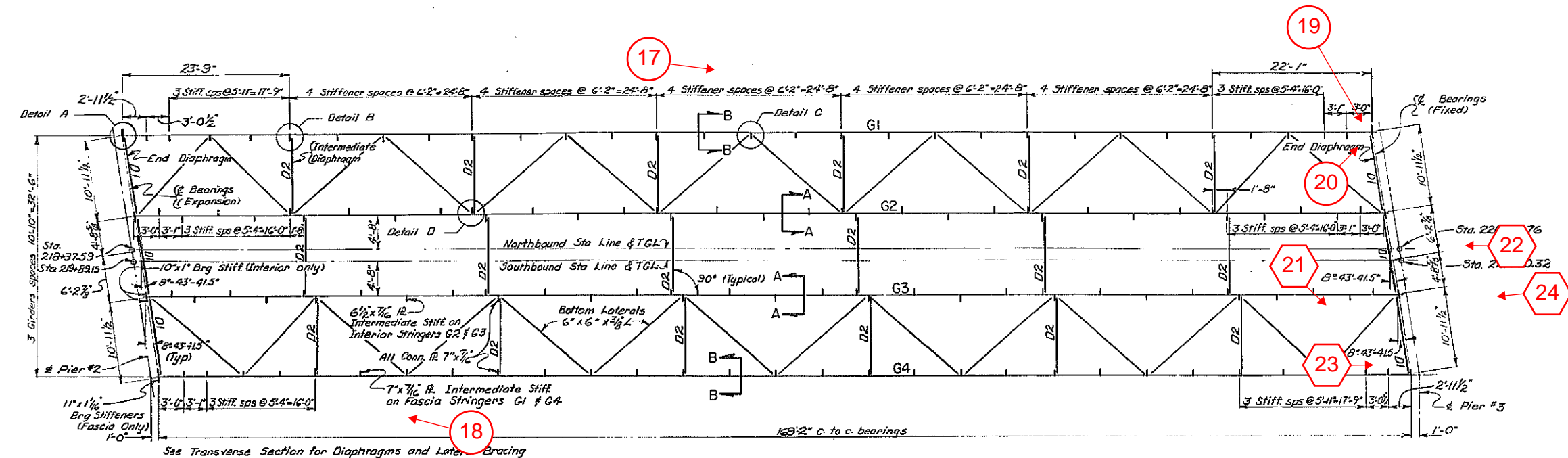


For haunch see
Haunch Table
Dwg. No. 34.

PROJECT ENGINEER: R.L. Parker
IN CHARGE OF: F. Eckel
DESIGNED BY: N.A. Topps
DESIGN CHECKED BY: R. Thimble
DETAILED BY: J.E. Dorsey
DETAIL CHECKED BY: R.L. Parker

De Witt Yds. Span 2 Steel layout

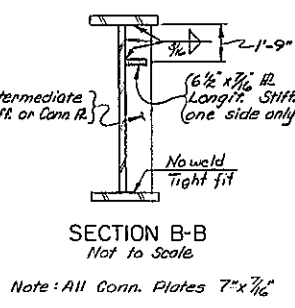
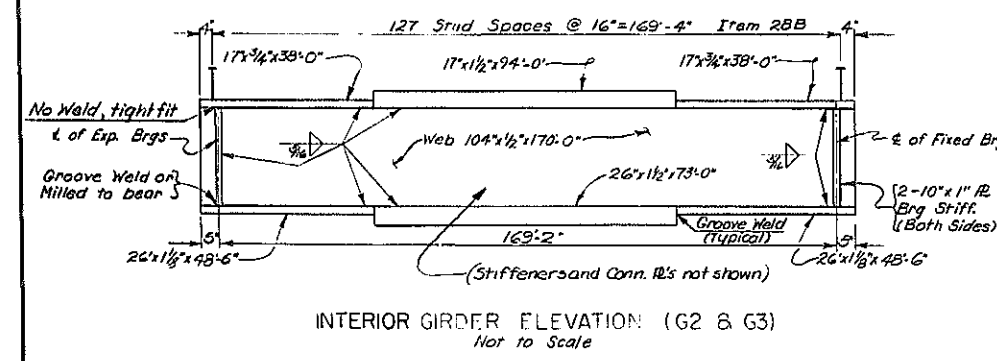
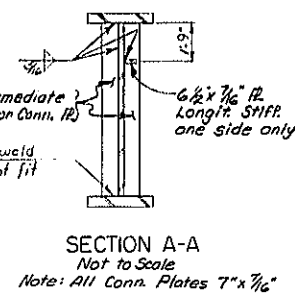
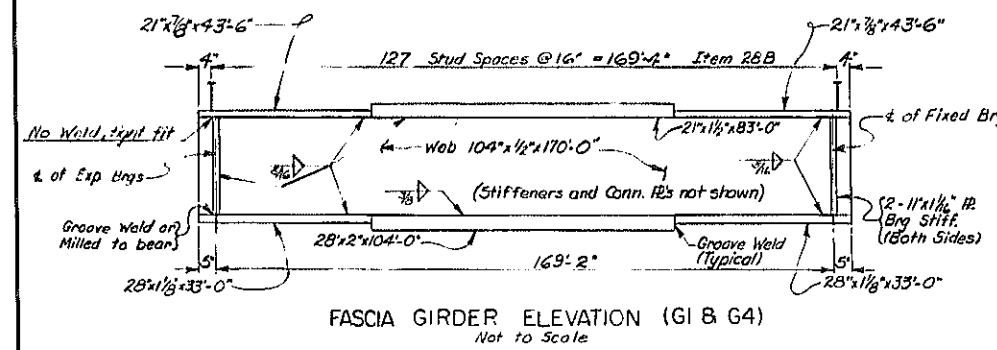
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	1-680-3(28) 1-481-2(116)	199	309
INTERSTATE ROUTE CONNECTION 570 BUTTERNUT INTERCHANGE (PHASE 2) ONEIDA COUNTY				



LEGEND

- # SUPERSTRUCTURE PHOTOS
- # SUBSTRUCTURE PHOTOS

STEEL LAYOUT (SPAN 3 NB & SB)
Scale 1/8" = 1'-0"

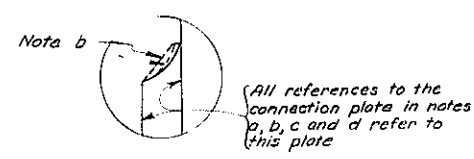
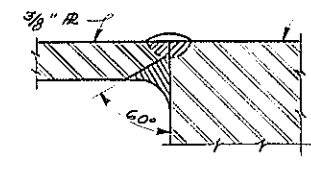


GIRDER	NORTHBOUND			SOUTHBOUND			D.L. DEFLECTION				CAMBER		
	THEO. BOT. OF SLAB EL.	± SO. BRG	± SPAN	THEO. BOT. OF SLAB EL.	± SO. BRG	± SPAN	STEEL (F.T.)	SLAB (F.T.)	S.D.L. (F.T.)	TOTAL (F.T.)	V.C.C. (F.T.)	TOTAL (F.T.)	TOTAL (F.T.)
SPAN 3	449.24	449.85	450.29	449.10	449.74	450.20	.11	.15	.11	.37	.08	.45	5 3/8
G1	449.24	449.85	450.29	449.10	449.74	450.20	.11	.15	.11	.37	.08	.45	5 3/8
G2	449.48	450.09	450.52	449.34	449.97	450.44	.12	.29	.04	.45	.08	.53	6 3/8
G3	449.46	450.07	450.50	449.39	450.02	450.48	.12	.29	.04	.45	.08	.53	6 3/8
G4	449.25	449.85	450.28	449.18	449.80	450.26	.11	.15	.11	.37	.08	.45	5 3/8

S.D.L. = superimposed dead load, includes weight of parapet and railing.
V.C.C. = vertical curve correction

- Note:
- a. The connection plate shall be prepared and welded as a single bevel groove weld as shown in Detail #1. It shall then be Air Carbon Arc gauged from the second side into sound weld metal and then welded as detailed. All welding shall be in the flat or "downhand" position.
 - b. The plate may be of any shape that will provide after welding, cutting, and finish grinding a smooth transition from the flange edge at a minimum radius of 12".
 - c. Both the connection plate and flange are to be the same type of steel.
 - d. Field welding to the connection plate will not be permitted.

Top of Bottom Flange when bottom flange is in tension
Bottom of Top Flange when top flange is in tension



LATERAL BRACING DETAILS
Not to Scale

For additional details of bottom lateral bracing see drawing No. 22

The webs, flanges and gusset plates for bottom lateral bracing for the span 3 girders shall be A.S.T.M. Designation A441 steel. Stiffeners, diaphragms, bearings, and bottom lateral bracing (except gusset plates) shall be A.S.T.M. A36 steel.

PROJECT ENGINEER R. PARKER
IN CHARGE OF F.W. ECKEL
DESIGNED BY S. PONS
DESIGN CHECKED BY H. THOMPSON
DETAILED BY W. QUAYSON
DETAIL CHECKED BY D.H. SMITH

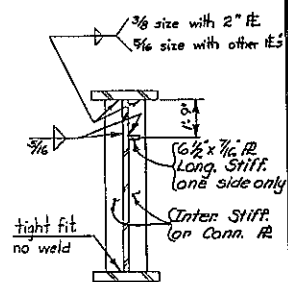
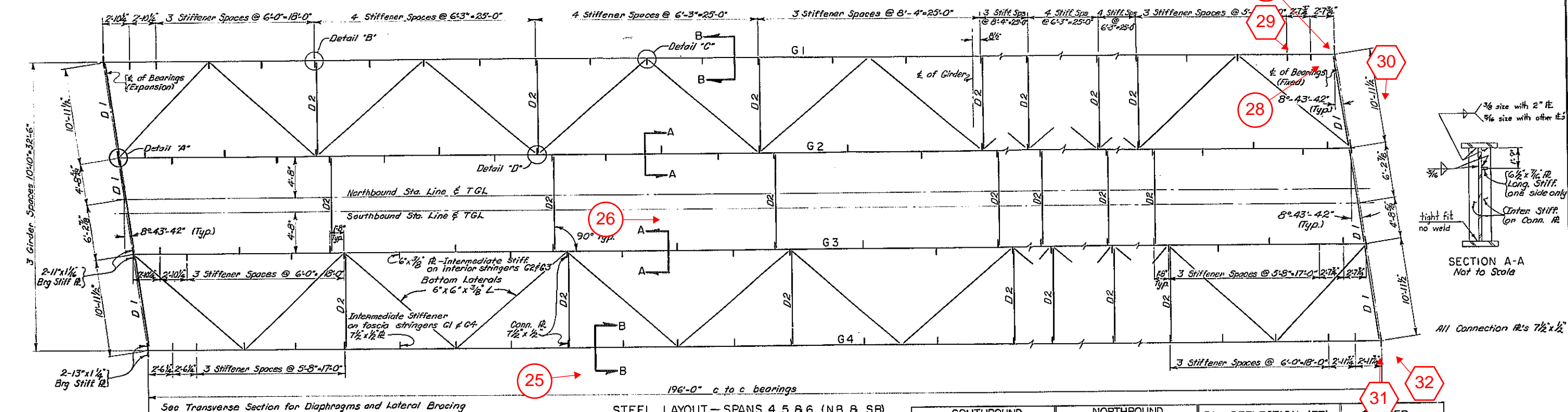
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

SPAN 3 NORTHBOUND
BIN 1093572

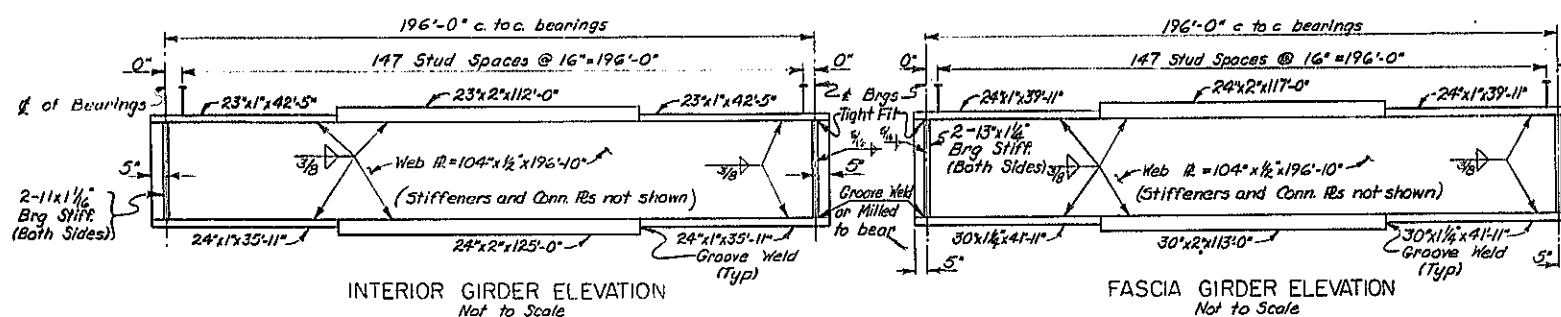
PHOTO LOCATION PLAN

F.I.S.H. 70-7

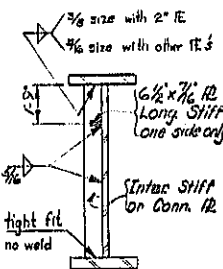
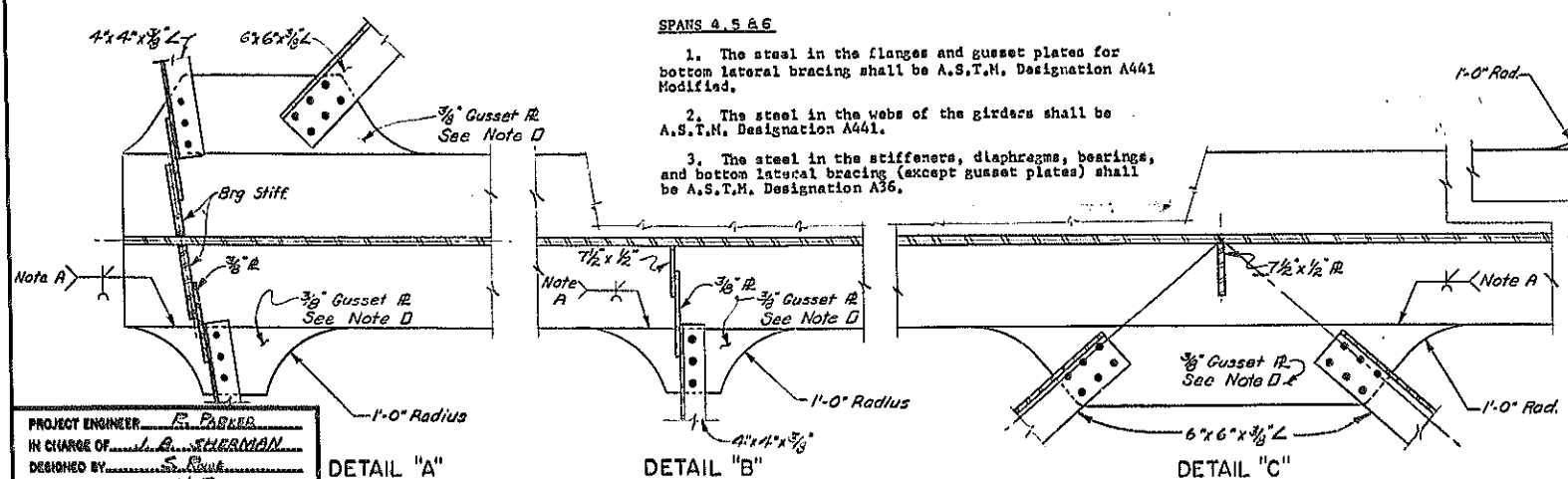
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	1-090-3(28) 1-481-2(116)	200	309
INTERSTATE ROUTE CONNECTION 570 SUTTERLY INTERCHANGE (PHASE 2) ONEIDA COUNTY				

SECTION A-A
Not to Scale

All Connection R's 7/8" x 1/2"



GIRDER	SOUTHBOUND						NORTHBOUND						DL DEFLECTION (FT)				CAMBER	
	THEO. BOT. OF SLAB EL.	± SPAN	± NO. BRG	± SO. BRG	± SPAN	± NO. BRG	THEO. BOT. OF SLAB EL.	± SPAN	± NO. BRG	± SO. BRG	± SPAN	± NO. BRG	STEEL	SLAB	SDL	TOTAL DL	VCC (FT)	TOTAL
SPAN 4																		
G1	450.21	450.54	450.63	450.30	450.59	450.66	450.21	450.54	450.63	450.30	450.59	450.66	0.172	0.212	0.168	0.552	0.113	0.665
G2	450.45	450.77	450.86	450.53	450.82	450.89	450.45	450.77	450.86	450.53	450.82	450.89	0.178	0.378	0.062	0.618	0.113	0.731
G3	450.48	450.80	450.89	450.51	450.80	450.85	450.48	450.80	450.89	450.51	450.80	450.85	0.178	0.378	0.062	0.618	0.113	0.731
G4	450.27	450.38	450.67	450.29	450.57	450.63	450.27	450.38	450.67	450.29	450.57	450.63	0.172	0.212	0.168	0.552	0.113	0.665
SPAN 5																		
G1	450.63	450.50	450.14	450.66	450.50	450.10	450.63	450.50	450.14	450.66	450.50	450.10	0.172	0.212	0.168	0.552	0.113	0.665
G2	450.86	450.72	450.36	450.89	450.72	450.32	450.86	450.72	450.36	450.89	450.72	450.32	0.178	0.378	0.062	0.618	0.113	0.731
G3	450.89	450.75	450.38	450.85	450.65	450.28	450.89	450.75	450.38	450.85	450.65	450.28	0.178	0.378	0.062	0.618	0.113	0.731
G4	450.66	450.52	450.15	450.63	450.45	450.05	450.66	450.52	450.15	450.63	450.45	450.05	0.172	0.212	0.168	0.552	0.113	0.665
SPAN 6																		
G1	450.13	449.54	448.72	450.09	449.47	448.62	450.13	449.54	448.72	450.09	449.47	448.62	0.172	0.212	0.168	0.552	0.113	0.665
G2	450.35	449.75	448.93	450.31	449.68	448.83	450.35	449.75	448.93	450.31	449.68	448.83	0.178	0.378	0.062	0.618	0.113	0.731
G3	450.37	449.77	448.94	450.27	449.64	448.78	450.37	449.77	448.94	450.27	449.64	448.78	0.178	0.378	0.062	0.618	0.113	0.731
G4	450.14	449.53	448.70	450.04	449.40	448.54	450.14	449.53	448.70	450.04	449.40	448.54	0.172	0.212	0.168	0.552	0.113	0.665

SECTION B-B
Not to Scale

DETAIL "D"

LEGEND

- # SUPERSTRUCTURE PHOTOS
SUBSTRUCTURE PHOTOS

Note:
A. The connection plate shall be prepared and welded as a single bevel groove weld as shown in Detail A. It shall then be Air Carbon-Arc gouged from the second side into sound weld metal and then welded as detailed. All welding shall be in the flat or "downhand" position.
B. The plate may be of any shape that will provide after welding, cutting, and finish grinding a smooth transition from the flange edge of a minimum radius of 12".
C. Lateral bracing shall be attached to gusset plates with 1/2" high strength bolts. Field welding will not be permitted.
D. The gusset plate shall be the same type of steel as the flange to which it is welded.

BRIDGE NO. 2

INTERSTATE ROUTE 481 OVER DEWITT YARDS

SPANS 4 NORTHBOUND

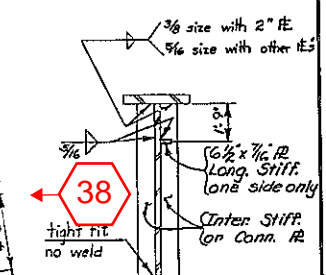
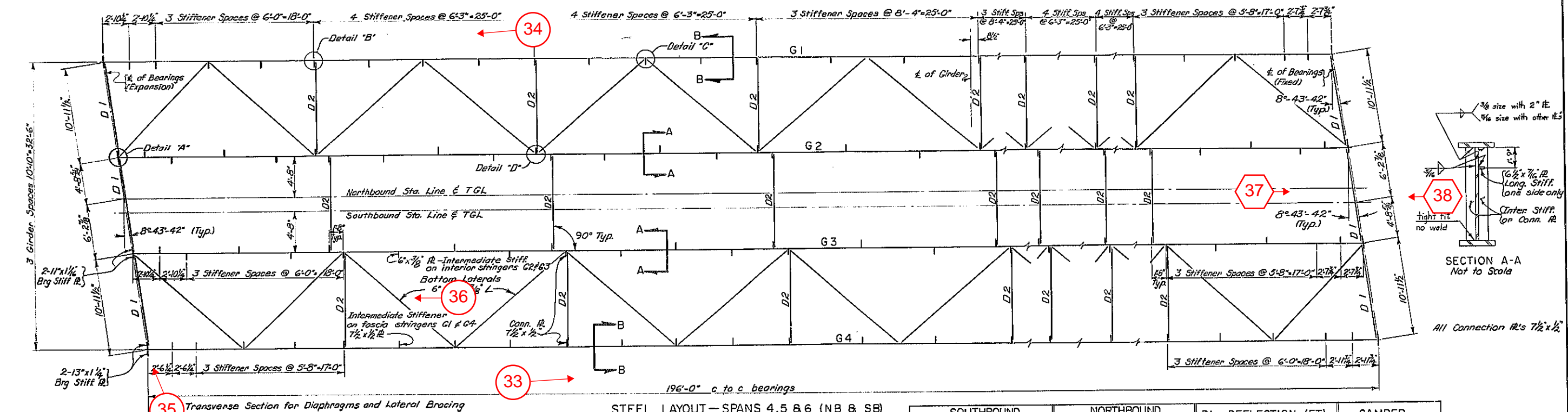
BIN 1093572

PHOTO LOCATION PLAN

PROJECT ENGINEER: R. PARKER
IN CHARGE OF: J. R. SHERMAN
DESIGNED BY: S. R. R. R.
DESIGN CHECKED BY: M. T. T. T.
DETAILED BY: J. T. T. T.
DETAIL CHECKED BY: D. H. SMITH

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	1-690-3(28) 1-481-2(116)	200	309

INTERSTATE ROUTE CONNECTION 570
SUTTERBURY INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

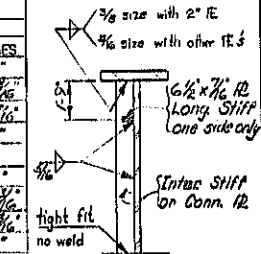
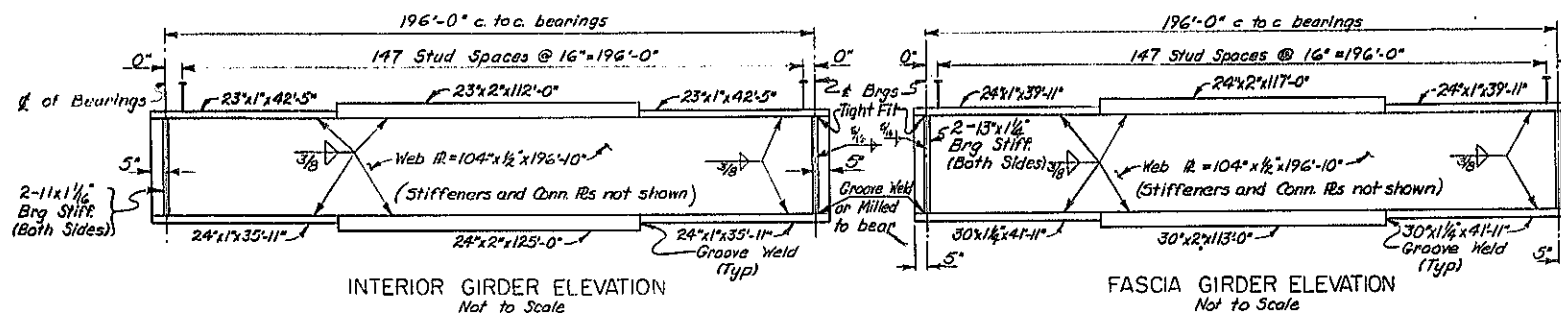


SECTION A-

All Connection R's $7\frac{1}{2} \times \frac{1}{2}$ "

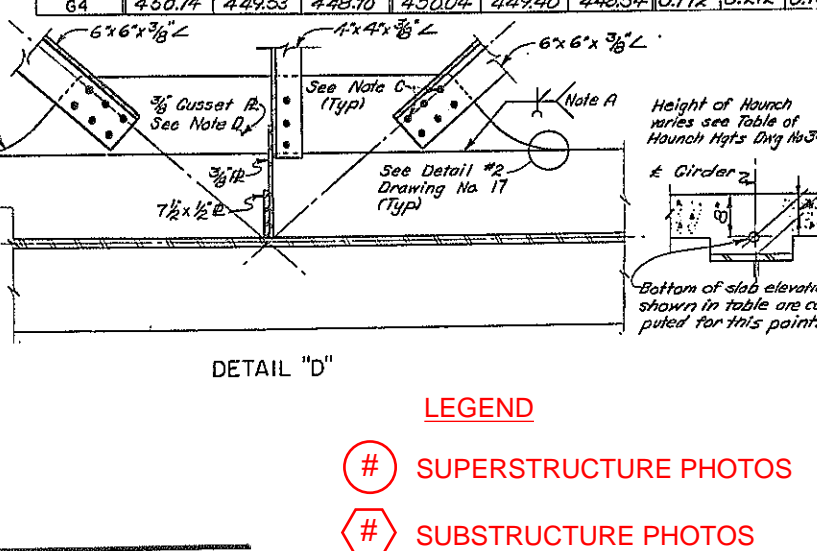
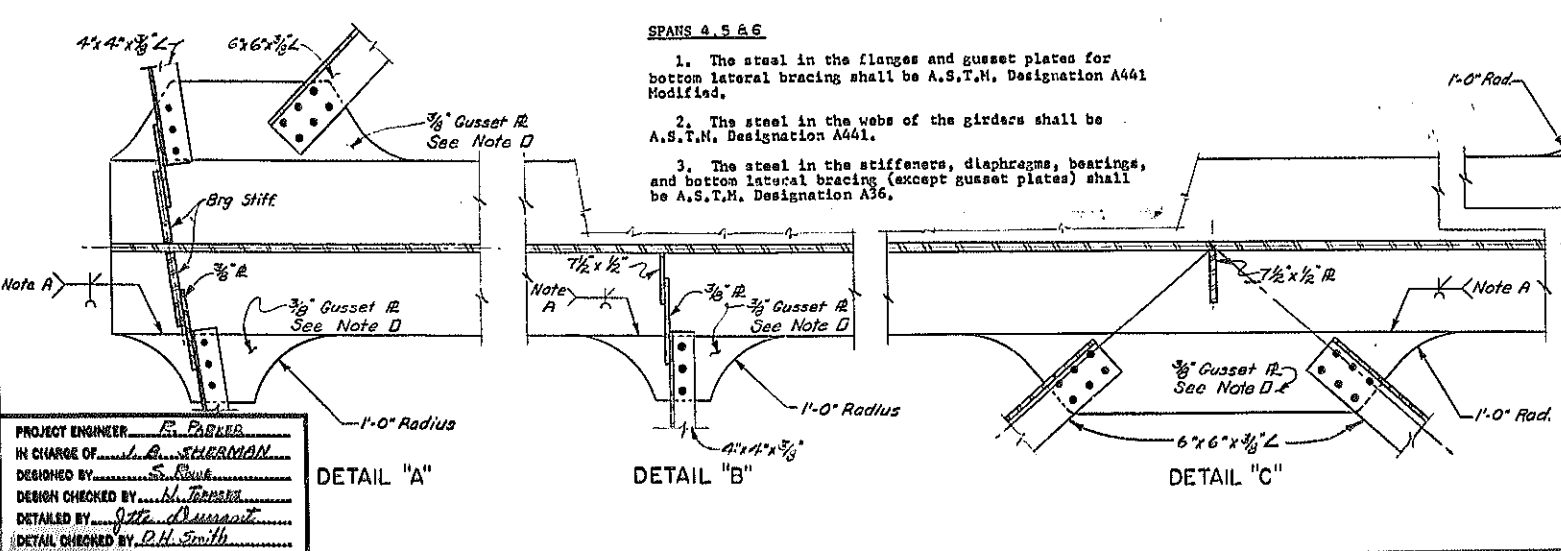
STEEL LAYOUT - SPANS 4, 5 & 6 (NB & SB)
Scale: $\frac{3}{16}'' = 1'-0''$

GIRDER	SOUTHBOUND			NORTHBOUND			DL DEFLECTION (FT)				CAMBER		
	THEO. BOT. OF SLAB EL.	THEO. BOT. OF SLAB EL.	THEO. BOT. OF SLAB EL.	STEEL	SLAB	SDL	TOTAL DL	VCC(FT)	TOTAL				
SPAN 4	± SO. BRG	± SPAN	± NO. BRG	± SO. BRG	± SPAN	± NO. BRG					FEET	INCH	
G1	450.21	450.54	450.65	450.30	450.59	450.66	0.172'	0.212'	0.168'	0.552'	0.113'	0.665'	8"
G2	450.45	450.77	450.86	450.53	450.82	450.89	0.178'	0.378'	0.062'	0.618'	0.113'	0.731'	8"
G3	450.48	450.80	450.89	450.51	450.80	450.85	0.178'	0.378'	0.062'	0.618'	0.113'	0.731'	8"
G4	450.27	450.58	450.67	450.29	450.57	450.63	0.172'	0.212'	0.168'	0.552'	0.113'	0.665'	8"
SPAN 5													
G1	450.63	450.30	450.14	450.66	450.50	450.10	0.172'	0.212'	0.168'	0.552'	0.113'	0.665'	8"
G2	450.86	450.72	450.36	450.89	450.72	450.32	0.178'	0.378'	0.062'	0.618'	0.113'	0.731'	8"
G3	450.89	450.75	450.38	450.85	450.68	450.28	0.178'	0.378'	0.062'	0.618'	0.113'	0.731'	8"
G4	450.66	450.52	450.15	450.63	450.45	450.05	0.172'	0.212'	0.168'	0.552'	0.113'	0.665'	8"
SPAN 6													
G1	450.13	449.54	448.72	450.09	449.47	448.62	0.172'	0.212'	0.168'	0.552'	0.113'	0.665'	8"
G2	450.35	449.75	448.93	450.31	449.68	448.83	0.178'	0.378'	0.062'	0.618'	0.113'	0.731'	8"
G3	450.37	449.77	448.94	450.27	449.64	448.78	0.178'	0.378'	0.062'	0.618'	0.113'	0.731'	8"
G4	450.11	449.51	448.71	450.07	449.45	448.60	0.172'	0.212'	0.168'	0.552'	0.113'	0.665'	8"



SECTION B-1

SECTION B
Not to Scale



Notes:

- The connection plate shall be prepared and welded as a single bevel groove weld as shown in Detail #1. It shall then be Air Carbon-Arc gouged from the second side into sound weld metal and then welded as detailed. All welding shall be in the flat or "downhand" position.
- The plate may be of any shape that will provide, after welding, cutting, and finish grinding a smooth transition from the flange edge at a minimum radius of 12".
- Lateral bracing shall be attached to gusset plates with $\frac{7}{8}$ " ϕ high strength bolts. Field welding will not be permitted.
- The gusset plate shall be the same type of steel as the flange to which it is welded.

PROJECT ENGINEER R. PARKER
IN CHARGE OF J. A. SHERMAN
DESIGNED BY S. PARK
DETAIL CHECKED BY M. PARKER
DETAILED BY J. A. SHERMAN
DETAIL CHECKED BY D. H. SMITH

LEGEND

- # SUPERSTRUCTURE PHOTOS
- # SUBSTRUCTURE PHOTOS

BRIDGE NO. 2

INTERSTATE ROUTE 481 OVER DEWITT YARDS

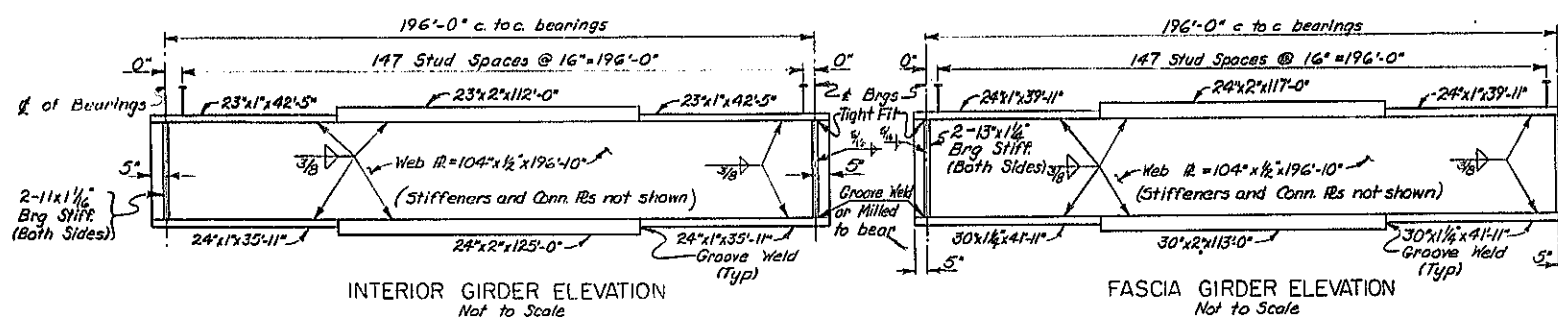
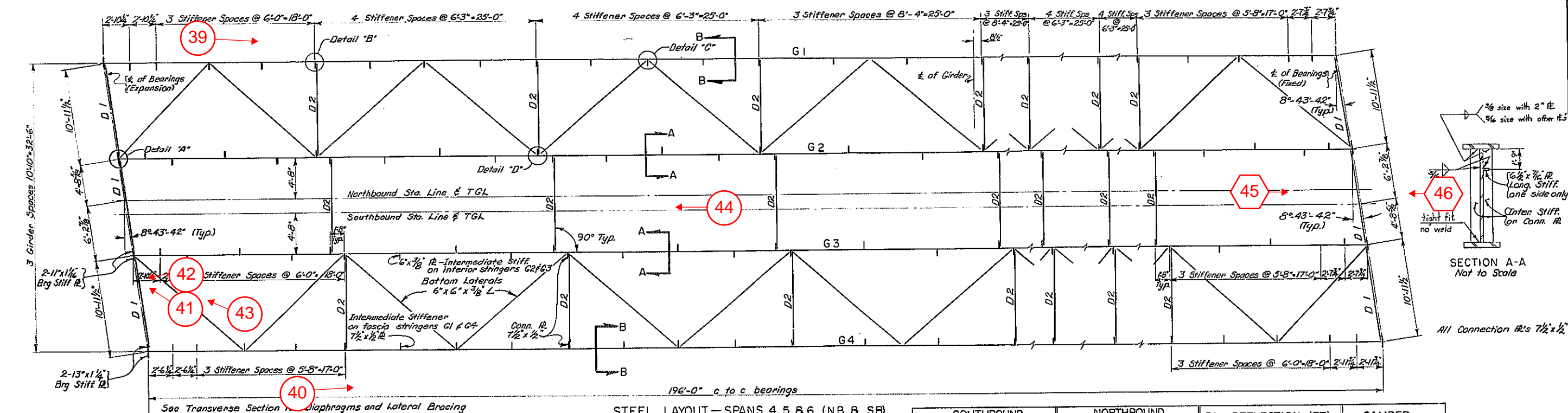
SPAN: 5 NORTHBOUND
BIN 1093572

PHOTO LOCATION PLAN

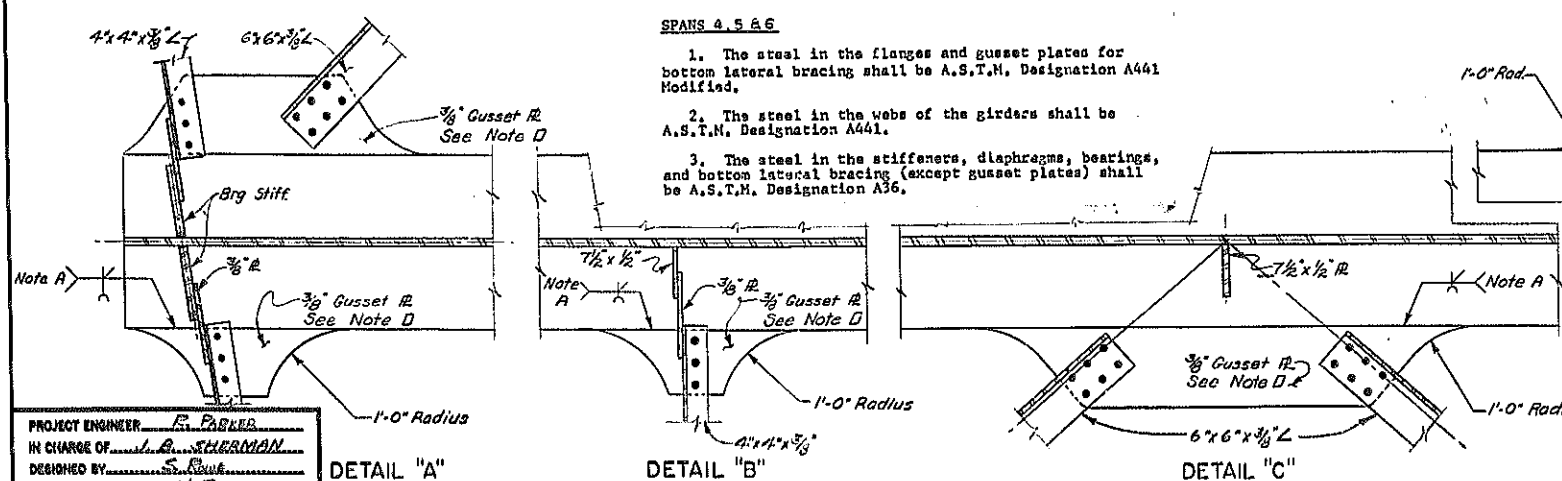
LENGTH = 196'-6"

F.I.S.H. 70-7

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	1-090-3(28) 1-481-2(116)	200	309
INTERSTATE ROUTE CONNECTION 570 SUTTERHUT INTERCHANGE (PHASE 2) ONEIDA COUNTY				



GIRDER	SOUTHBOUND						NORTHBOUND						DL DEFLECTION (FT)				CAMBER	
	THEO. BOT. OF SLAB EL.	± SPAN	± NO. BRG	± SO. BRG	± SPAN	± NO. BRG	THEO. BOT. OF SLAB EL.	± SPAN	± NO. BRG	± SO. BRG	± SPAN	± NO. BRG	STEEL	SLAB	SDL	TOTAL DL	VCC (FT)	TOTAL FEET INCHES
SPAN 4																		
G1	450.21	450.54	450.63	450.30	450.59	450.66	450.21	450.54	450.63	450.30	450.59	450.66	0.172	0.212	0.168	0.552	0.113	0.665
G2	450.45	450.77	450.86	450.53	450.82	450.89	450.45	450.77	450.86	450.53	450.82	450.89	0.178	0.378	0.062	0.618	0.113	0.731
G3	450.48	450.80	450.89	450.51	450.80	450.85	450.48	450.80	450.89	450.51	450.80	450.85	0.178	0.378	0.062	0.618	0.113	0.731
G4	450.27	450.38	450.67	450.29	450.57	450.63	450.27	450.38	450.67	450.29	450.57	450.63	0.172	0.212	0.168	0.552	0.113	0.665
SPAN 5																		
G1	450.63	450.50	450.14	450.66	450.50	450.10	450.63	450.50	450.14	450.66	450.50	450.10	0.172	0.212	0.168	0.552	0.113	0.665
G2	450.86	450.72	450.36	450.89	450.72	450.32	450.86	450.72	450.36	450.89	450.72	450.32	0.178	0.378	0.062	0.618	0.113	0.731
G3	450.89	450.75	450.38	450.85	450.65	450.28	450.89	450.75	450.38	450.85	450.65	450.28	0.178	0.378	0.062	0.618	0.113	0.731
G4	450.66	450.52	450.15	450.63	450.45	450.05	450.66	450.52	450.15	450.63	450.45	450.05	0.172	0.212	0.168	0.552	0.113	0.665
SPAN 6																		
G1	450.13	449.54	448.72	450.09	449.47	448.62	450.13	449.54	448.72	450.09	449.47	448.62	0.172	0.212	0.168	0.552	0.113	0.665
G2	450.35	449.75	448.93	450.31	449.68	448.83	450.35	449.75	448.93	450.31	449.68	448.83	0.178	0.378	0.062	0.618	0.113	0.731
G3	450.37	449.77	448.94	450.27	449.64	448.78	450.37	449.77	448.94	450.27	449.64	448.78	0.178	0.378	0.062	0.618	0.113	0.731
G4	450.14	449.53	448.70	450.04	449.40	448.54	450.14	449.53	448.70	450.04	449.40	448.54	0.172	0.212	0.168	0.552	0.113	0.665



DETAIL "D"

LEGEND

- # SUPERSTRUCTURE PHOTOS
SUBSTRUCTURE PHOTOS

Note:
A. The connection plate shall be prepared and welded as a single bevel groove weld as shown in Detail A. It shall then be air carbon-arc gouged from the second side into sound weld metal and then welded as detailed. All welding shall be in the flat or "downhand" position.
B. The plate may be of any shape that will provide after welding, cutting, and finish grinding a smooth transition from the flange edge of a minimum radius of 12".
C. Lateral bracing shall be attached to gusset plates with 1/2" high strength bolts. Field welding will not be permitted.
D. The gusset plate shall be the same type of steel as the flange to which it is welded.

BRIDGE NO. 2

INTERSTATE ROUTE 481 OVER DEWITT YARDS

SPAN 6 NORTHBOUND
BIN 1093572

PHOTO LOCATION PLAN

PROJECT ENGINEER: R. PARKER
IN CHARGE OF: J. R. SHERMAN
DESIGNED BY: S. R. R. R.
DESIGN CHECKED BY: M. T. R. R.
DETAILED BY: J. R. R. R.
DETAIL CHECKED BY: D. H. R. R.

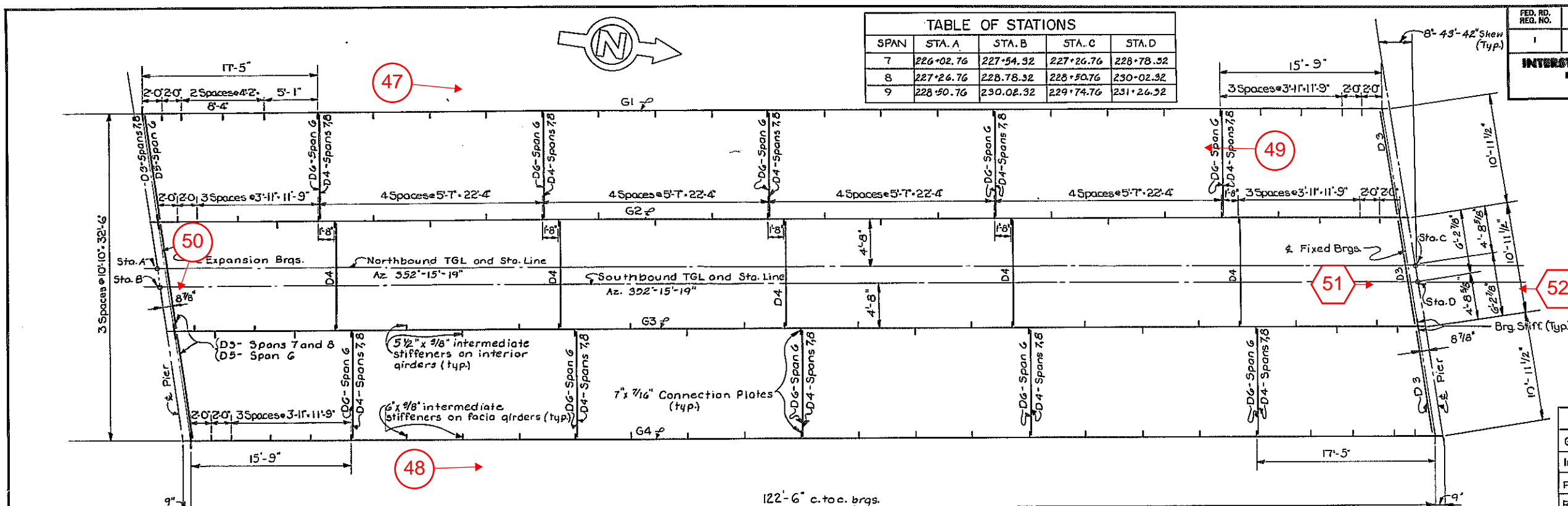
LENGTH = 196'-6"

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	1-690-3(28)	202	309
INTERSTATE ROUTE CONNECTION 570				
INTERCHANGE (PHASE 2)				
CHONDAGA COUNTY				

LEGEND

- # SUPERSTRUCTURE PHOTOS
- # SUBSTRUCTURE PHOTOS

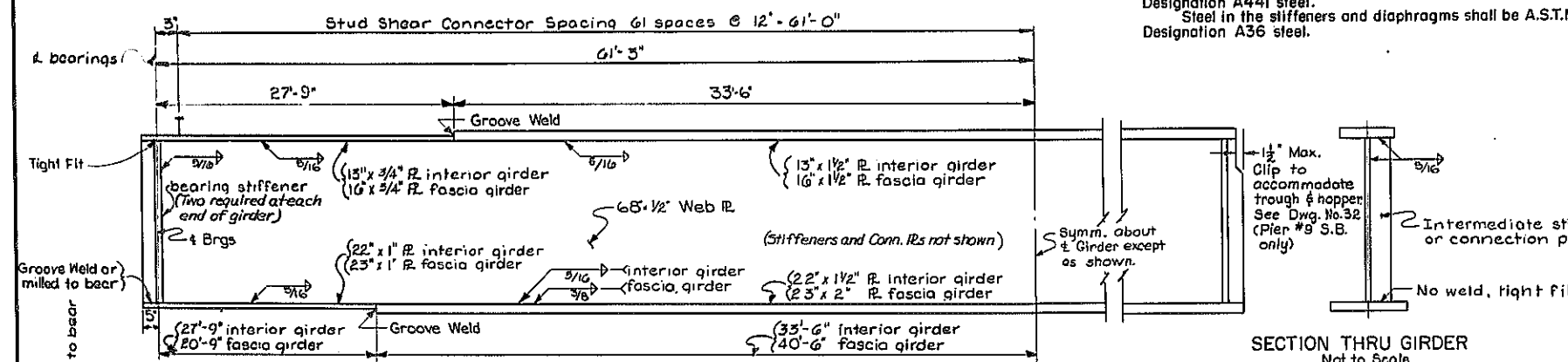
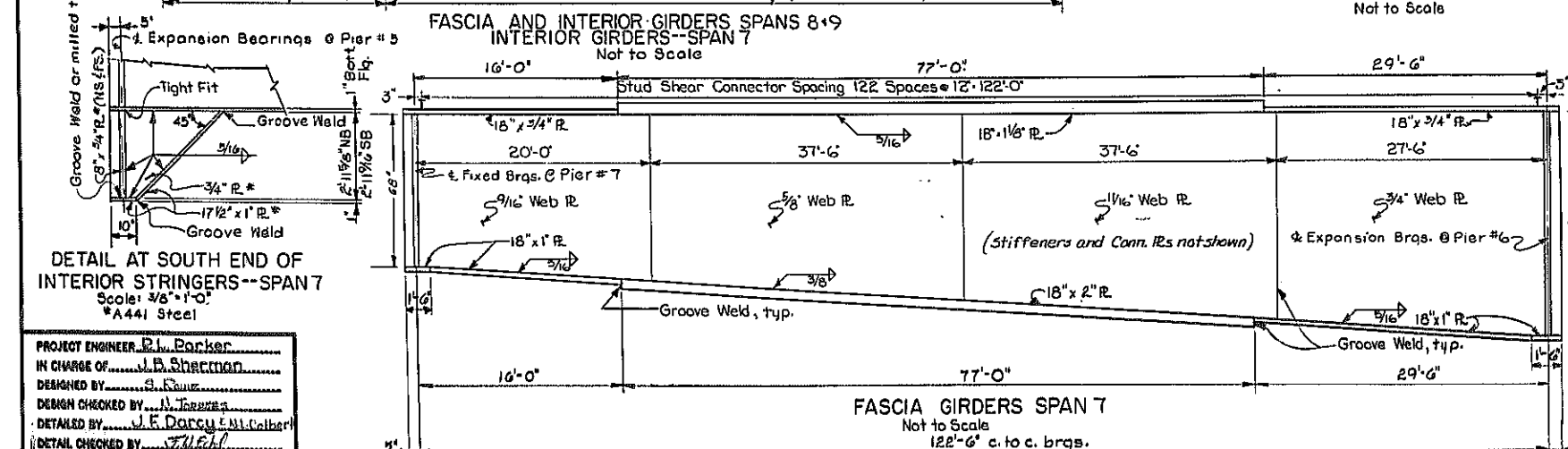
TABLE OF STATIONS				
SPAN	STA. A	STA. B	STA. C	STA. D
7	226+02.76	227+54.32	227+26.76	228+78.32
8	227+26.76	228+78.32	228+50.76	230+02.32
9	228+50.76	230+02.32	229+74.76	231+26.32



STEEL FRAMING PLAN SPANS 7, 8 & 9 (NB+SB)

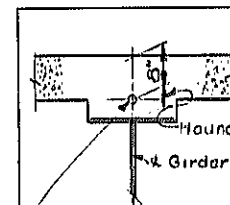
Scale: 3/16" = 1'-0"

Steel in the girder webs and flanges shall be A.S.T.M. Designation A441 steel.
Steel in the stiffeners and diaphragms shall be A.S.T.M. Designation A36 steel.

SECTION THRU GIRDER
Not to ScaleFASCIA GIRDERS SPAN 7
Not to Scale
122'-6" c. to c. brgs.

BOTTOM OF SLAB ELEVATIONS

NORTHBOUND					SOUTHBOUND				
GIRDER	SPAN	EXP. BRGS.	CL. SPAN	CL. FIX. BRGS.	GIRDER	SPAN	EXP. BRGS.	CL. SPAN	CL. FIX. BRGS.
G1	7	448.60	447.95	447.22	G1	7	448.70	448.07	447.35
G2	7	448.81	448.16	447.42	G2	7	448.91	448.28	447.56
G3	7	448.77	448.11	447.37	G3	7	448.93	448.29	447.57
G4	7	448.52	447.87	447.12	G4	7	448.68	448.05	447.32
G1	8	447.20	446.37	445.45	G1	8	447.33	446.52	445.63
G2	8	447.40	446.57	445.65	G2	8	447.54	446.73	445.83
G3	8	447.35	446.52	445.59	G3	8	447.55	446.73	445.83
G4	8	447.10	446.27	445.34	G4	8	447.30	446.48	445.58
G1	9	445.43	444.42	443.53	G1	9	445.60	444.61	443.87
G2	9	445.63	444.62	443.88	G2	9	445.80	444.81	443.74
G3	9	445.57	444.86	443.46	G3	9	445.81	444.81	443.73
G4	9	445.32	444.50	443.20	G4	9	445.56	444.56	443.48



Bottom of Slab Elevation shown in table are computed for this point.

*Height of Haunch varies. See Table of Haunch Heights on Drawing No. 34.

DEFLECTIONS

		DEFLECTIONS				CAMBER	
GIRDER	SPAN	STEEL (FT)	SLAB (FT)	S.D.L. (FT)	TOTAL (FT)	V.C.C. (FT)	TOTAL (FT)
G1	7	.05	.09	.06	.20	.04	.24
G2	7	.08	.24	.03	.35	.04	.39
G3	7	.08	.24	.03	.35	.04	.39
G4	7	.05	.09	.06	.20	.04	.24
G1	8	.07	.12	.08	.27	.04	.31
G2	8	.08	.24	.03	.35	.04	.39
G3	8	.08	.24	.03	.35	.04	.39
G4	8	.07	.12	.08	.27	.04	.31
G1	9	.07	.12	.08	.27	.02	.29
G2	9	.08	.24	.03	.35	.03	.38
G3	9	.08	.24	.03	.35	.04	.39
G4	9	.07	.12	.08	.27	.04	.31
G1	9	.07	.12	.08	.27	-.06	.21
G2	9	.08	.24	.03	.35	.01	.36
G3	9	.08	.24	.03	.35	.04	.39
G4	9	.07	.12	.08	.27	.04	.31

V.C.C.=Vertical Curve Camber
S.D.L.=Superimposed dead load, includes the weight of sidewalk & railing.

BRIDGE NO. 2

INTERSTATE ROUTE 481 OVER DEWITT YARDS

SPAN 7 NORTHBOUND

BIN 1093572

PHOTO LOCATION PLAN

PROJECT ENGINEER: R. J. Barker
IN CHARGE OF: J. D. Sherman
DESIGNED BY: S. E. Jones
DESIGN CHECKED BY: J. E. Dorey
DETAILED BY: J. E. Dorey
DETAIL CHECKED BY: J. E. Dorey

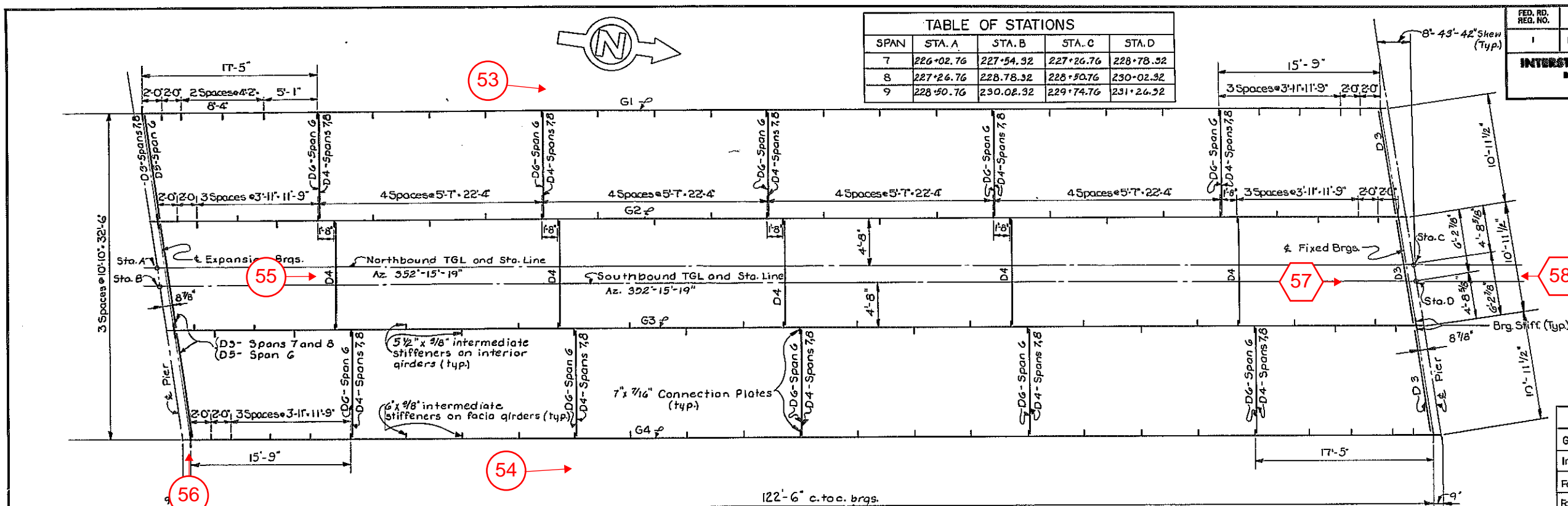
Bin #2 Dewitt Yards
SPANS 7 & 8

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	1-690-3(28)	202	309
INTERSTATE ROUTE CONNECTION 570				
INTERCHANGE (PHASE 2)				
CHONDAGA COUNTY				

LEGEND

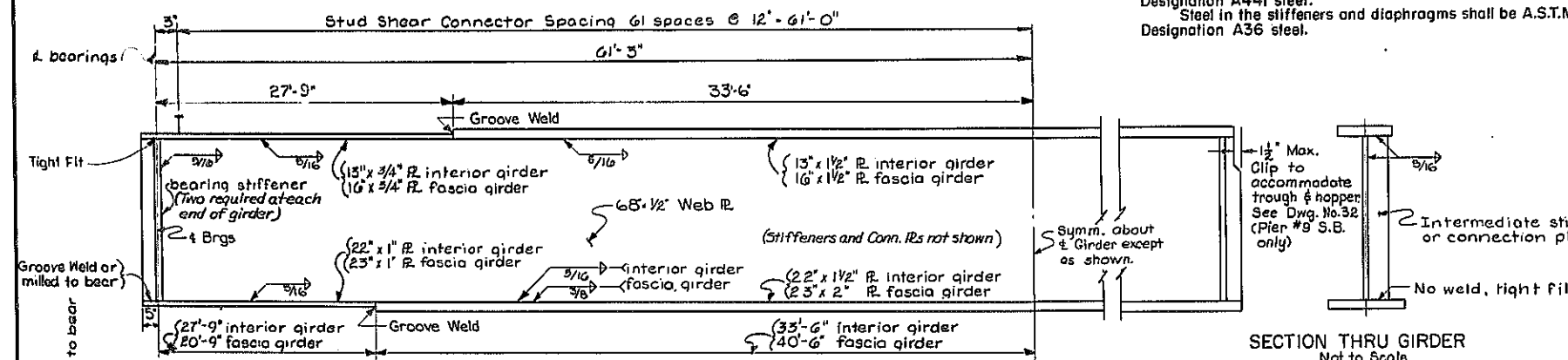
- # SUPERSTRUCTURE PHOTOS
- # SUBSTRUCTURE PHOTOS

TABLE OF STATIONS				
SPAN	STA. A	STA. B	STA. C	STA. D
7	226+02.76	227+54.32	227+26.76	228+78.32
8	227+26.76	228+78.32	228+50.76	230+02.32
9	228+50.76	230+02.32	229+74.76	231+26.32

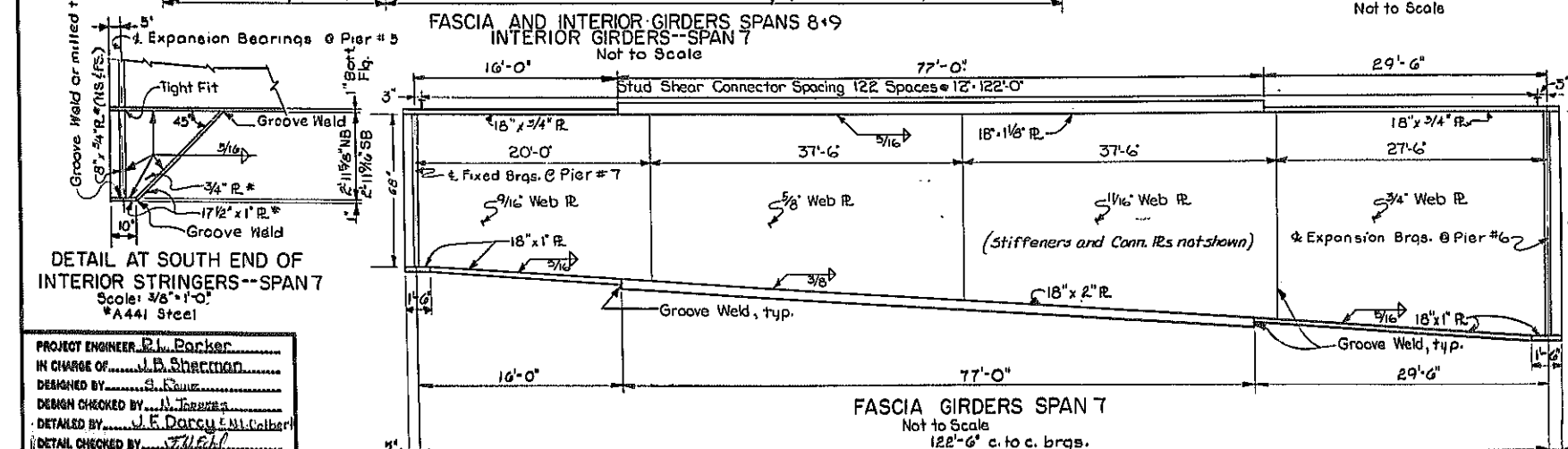


STEEL FRAMING PLAN SPANS 7, 8 & 9 (NB+SB)
Scale: 3/16" = 1'-0"

Steel in the girder webs and flanges shall be A.S.T.M. Designation A441 steel.
Steel in the stiffeners and diaphragms shall be A.S.T.M. Designation A36 steel.



SECTION THRU GIRDER
Not to Scale



FASCIA GIRDERS SPAN 7
Not to Scale
122'-6" c.to.c. brgs.

BOTTOM OF SLAB ELEVATIONS

NORTHBOUND					SOUTHBOUND				
GIRDER	SPAN	EXP. BRGS.	CL. SPAN	CL. FIX. BRGS.	GIRDER	SPAN	EXP. BRGS.	CL. SPAN	CL. FIX. BRGS.
G1	7	448.60	447.95	447.22	G1	7	448.70	448.07	447.35
G2	7	448.81	448.16	447.42	G2	7	448.91	448.28	447.56
G3	7	448.77	448.11	447.37	G3	7	448.93	448.29	447.57
G4	7	448.52	447.87	447.12	G4	7	448.68	448.05	447.32
G1	8	447.20	446.37	445.45	G1	8	447.33	446.52	445.63
G2	8	447.40	446.57	445.65	G2	8	447.54	446.73	445.83
G3	8	447.35	446.52	445.59	G3	8	447.55	446.73	445.83
G4	8	447.10	446.27	445.34	G4	8	447.30	446.48	445.58
G1	9	445.43	444.42	443.53	G1	9	445.60	444.61	443.87
G2	9	445.63	444.62	443.88	G2	9	445.80	444.81	443.74
G3	9	445.57	444.86	443.46	G3	9	445.81	444.81	443.73
G4	9	445.32	444.50	443.20	G4	9	445.56	444.56	443.48

DEFLECTIONS

DEFLECTIONS					CAMBER		
GIRDER	SPAN	STEEL (FT)	SLAB (FT)	SDL (FT)	TOTAL (FT)	V.C.C. (FT)	TOTAL (FT)
G1	7	.05	.09	.06	.20	.04	.24
G2	7	.08	.24	.03	.35	.04	.39
G3	7	.08	.24	.03	.35	.04	.39
G4	7	.05	.09	.06	.20	.04	.24
G1	8	.07	.12	.08	.27	.04	.31
G2	8	.08	.24	.03	.35	.04	.39
G3	8	.08	.24	.03	.35	.04	.39
G4	8	.07	.12	.08	.27	.04	.31
G1	9	.07	.12	.08	.27	.02	.29
G2	9	.08	.24	.03	.35	.03	.38
G3	9	.08	.24	.03	.35	.04	.39
G4	9	.07	.12	.08	.27	.04	.31
G1	9	.07	.12	.08	.27	-.06	.21
G2	9	.08	.24	.03	.35	.01	.36
G3	9	.08	.24	.03	.35	.04	.39
G4	9	.07	.12	.08	.27	.04	.31

V.C.C.=Vertical Curve Camber
S.D.L.=Superimposed dead load, includes the weight of sidewalk & railing.

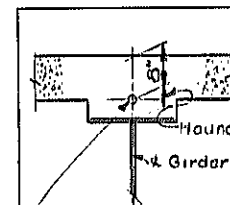
BRIDGE NO. 2

INTERSTATE ROUTE 481 OVER DEWITT YARDS

SPAN 8 NORTHBOUND

BIN 1093572

PHOTO LOCATION PLAN



Bottom of Slab Elevation shown in table are computed for this point.

*Height of Haunch varies. See Table of Haunch Heights on Drawing No. 34.

PROJECT ENGINEER: R. J. Barker
IN CHARGE OF: J. D. Sherman
DESIGNED BY: J. D. Sherman
DESIGN CHECKED BY: J. D. Sherman
DETAILED BY: J. D. Sherman
DETAIL CHECKED BY: J. D. Sherman

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	1-690-3(28)	202	309
INTERSTATE ROUTE CONNECTION 570				
INTERCHANGE (PHASE 2)				
CHONDAGA COUNTY				

LEGEND

- # SUPERSTRUCTURE PHOTOS
SUBSTRUCTURE PHOTOS

TABLE OF STATIONS				
SPAN	STA. A	STA. B	STA. C	STA. D
7	226+02.76	227+54.32	227+26.76	228+78.32
8	227+26.76	228+78.32	228+50.76	230+02.32
9	228+50.76	230+02.32	229+74.76	231+26.32

STEEL FRAMING PLAN SPANS 7, 8 & 9 (NB+SB)

Scale: 3/16" = 1'-0"

Steel in the girder webs and flanges shall be A.S.T.M. Designation A441 steel.
Steel in the stiffeners and diaphragms shall be A.S.T.M. Designation A36 steel.

BOTTOM OF SLAB ELEVATIONS

NORTHBOUND					SOUTHBOUND				
GIRDER	SPAN	EXP. BRGS.	CL. SPAN	CL. FIX. BRGS.	GIRDER	SPAN	EXP. BRGS.	CL. SPAN	CL. FIX. BRGS.
G1	7	448.60	447.95	447.22	G1	7	448.70	448.07	447.35
G2	7	448.81	448.16	447.42	G2	7	448.91	448.28	447.56
G3	7	448.77	448.11	447.37	G3	7	448.93	448.29	447.57
G4	7	448.52	447.87	447.12	G4	7	448.68	448.05	447.32
G1	8	447.20	446.37	445.45	G1	8	447.33	446.52	445.63
G2	8	447.40	446.57	445.65	G2	8	447.54	446.73	445.83
G3	8	447.35	446.52	445.59	G3	8	447.55	446.73	445.83
G4	8	447.10	446.27	445.34	G4	8	447.30	446.48	445.58
G1	9	445.43	444.42	443.53	G1	9	445.60	444.61	443.87
G2	9	445.63	444.62	443.88	G2	9	445.80	444.81	443.74
G3	9	445.57	444.56	443.46	G3	9	445.81	444.81	443.73
G4	9	445.32	444.50	443.20	G4	9	445.56	444.56	443.48

DEFLECTIONS

		DEFLECTIONS				CAMBER	
GIRDER	SPAN	STEEL (FT.)	SLAB (FT.)	S.D.L. (FT.)	TOTAL (FT.)	V.C.C. (FT.)	TOTAL (FT.)
		(IN)	(IN)	(IN)	(IN)	(IN)	(IN)
G1	7	.05	.09	.06	.20	.04	.24
G2	7	.08	.24	.03	.35	.04	.39
G3	7	.08	.24	.03	.35	.04	.39
G4	7	.05	.09	.06	.20	.04	.24
G1	8	.07	.12	.08	.27	.04	.31
G2	8	.08	.24	.03	.35	.04	.39
G3	8	.08	.24	.03	.35	.04	.39
G4	8	.07	.12	.08	.27	.04	.31
G1	9	.07	.12	.08	.27	.02	.29
G2	9	.08	.24	.03	.35	.03	.38
G3	9	.08	.24	.03	.35	.04	.39
G4	9	.07	.12	.08	.27	.04	.31
G1	9	.07	.12	.08	.27	-.06	.21
G2	9	.08	.24	.03	.35	.01	.36
G3	9	.08	.24	.03	.35	.04	.39
G4	9	.07	.12	.08	.27	.04	.31

V.C.C.=Vertical Curve Camber
S.D.L.=Superimposed dead load, includes the weight of sidewalk & railing.

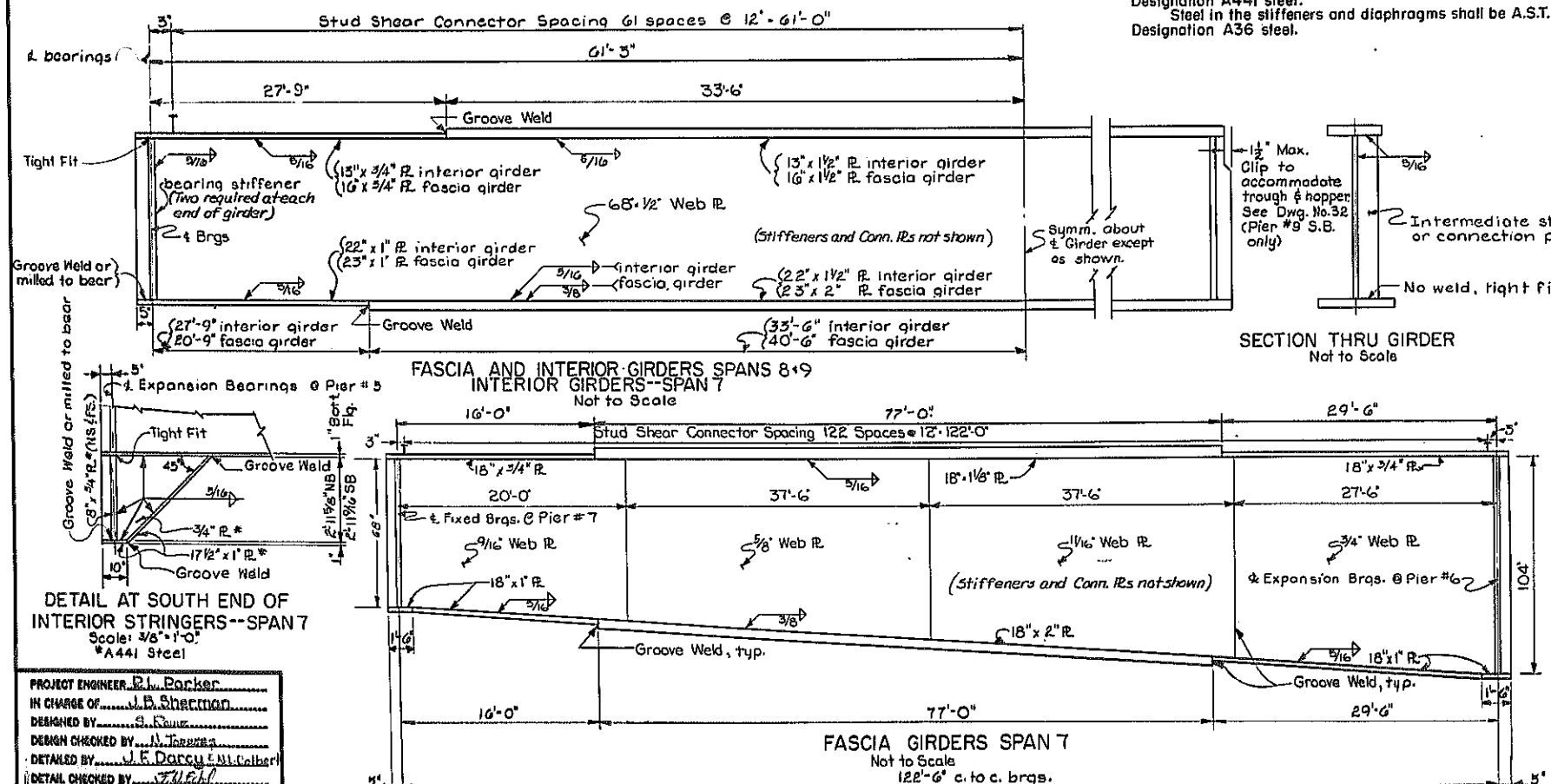
BRIDGE NO. 2

INTERSTATE ROUTE 481 OVER DEWITT YARDS

SPAN 9 NORTHBOUND

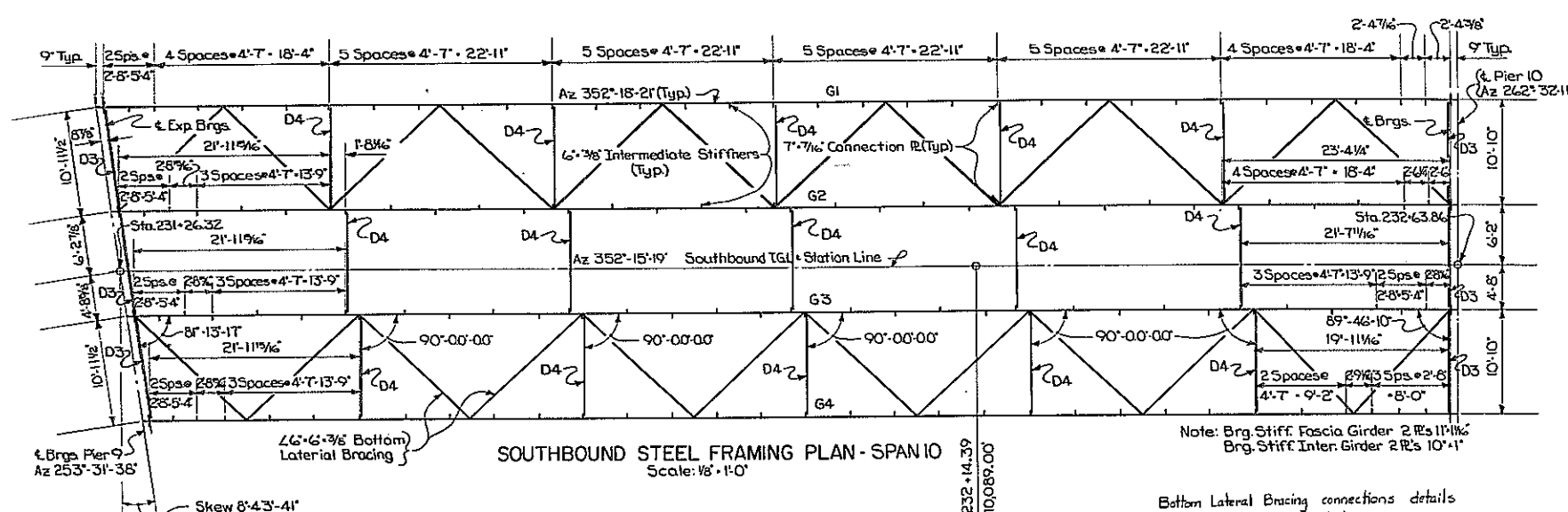
BIN 1093572

PHOTO LOCATION PLAN



PROJECT ENGINEER: R. J. Barker
IN CHARGE OF: J. D. Sherman
DESIGNED BY: S. E. Jones
DESIGN CHECKED BY: J. E. Dorey
DETAILED BY: J. E. Dorey
DETAIL CHECKED BY: J. E. Dorey

FED. RD. PROJ. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	1-690-3(28) 1-481-2(116)	204	309
INTERSTATE ROUTE CONNECTION 570 BUTTERNUT INTERCHANGE (PHASE 2) ONEIDA COUNTY				



BOTTOM OF SLAB ELEVATIONS

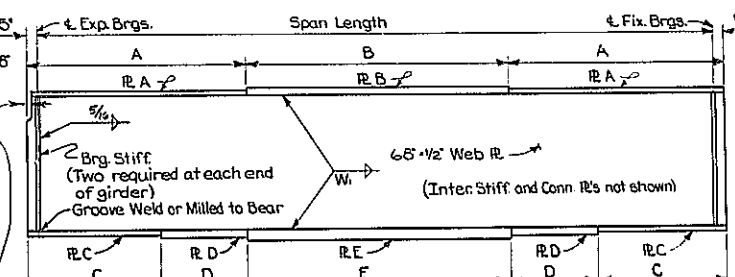
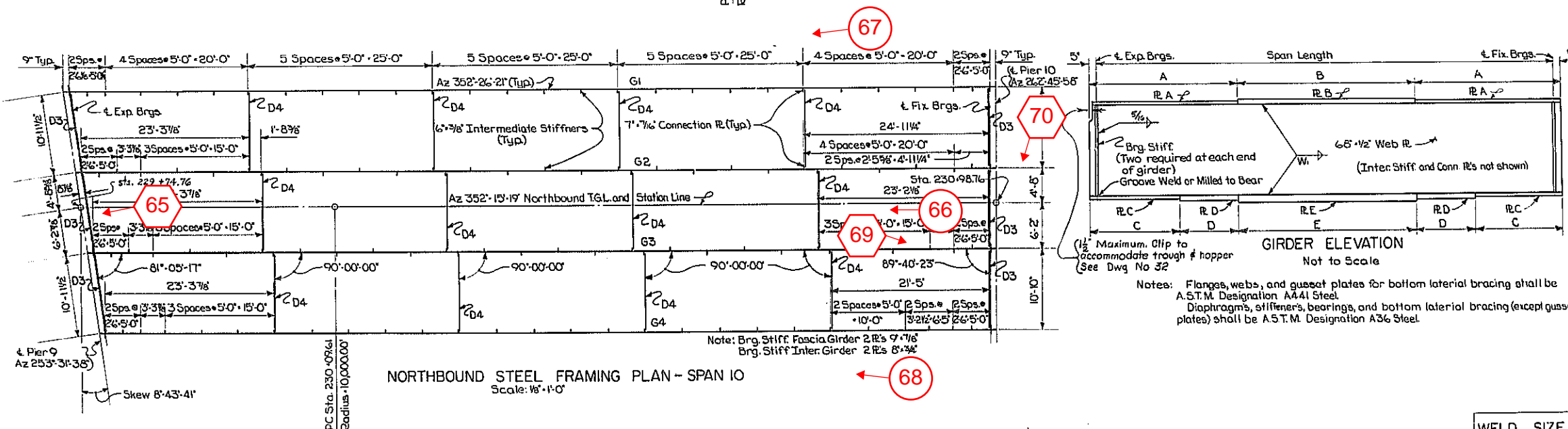
SOUTHBOUND				
GIRDER	SPAN	EXP. BRGS.	CL. SPAN	CL. FIX. BRGS.
G1	10	443.54	442.46	441.26
G2	10	443.72	442.49	441.15
G3	10	443.70	442.40	440.99
G4	10	443.45	442.16	440.77

NORTHBOUND				
GIRDER	SPAN	EXP. BRGS.	CL. SPAN	CL. FIX. BRGS.
G1	10	443.50	442.49	441.39
G2	10	443.56	442.42	441.19
G3	10	443.43	442.24	440.98
G4	10	443.17	442.00	440.75

Height of Haunch varies
see Table of Haunch Heights
(Drawing No. 34)

Bottom of slab elevations
shown in table are computed
for this point.

Bottom Lateral Bracing connections details
similar to Span 4 & 5 details.

TYPICAL SECTION
Not to Scale

SPAN 10 GIRDER TABLE

GIRDER	SPAN LENGTH CL. TO CL. BRGS.	FLANGE PLATE SIZES					FLANGE PLATE LENGTHS					DEFLECTIONS (FT)				CAMBER		STUD SHEAR CONNECTOR SPACING
		R. A.	R. B.	R. C.	R. D.	R. E.	A	B	C	D	E	STEEL	CONC.	S.D.L.	TOTAL	V.C.C.(FT.)	TOTAL	
																	inner	
Southbound																		
G1	138'-8 3/4"	23" x 1"	23" x 1 1/2"	24" x 1"	24" x 2"	24" x 2 1/2"	36'-9 7/8"	66'-0"	20'-3 3/4"	19'-0"	61'-0"	0.10	0.15	0.11	0.36	.06	0.42'	5'
G2	137'-0 3/4"	19" x 3/8"	19" x 1 1/2"	24" x 1"	None	24" x 2"	32'-11 1/8"	72'-0"	23'-5 1/4"	0	91'-0"	0.11	0.28	0.04	0.43	.06	0.49	5 7/8"
G3	135'-3 3/8"	19" x 7/8"	19" x 1 1/2"	24" x 1"	None	24" x 2"	32'-0 9/16"	72'-0"	22'-6 3/4"	0	91'-0"	0.10	0.27	0.04	0.41	.05	0.46	5 1/2"
G4	133'-7"	23" x 1"	23" x 1 1/2"	24" x 1"	24" x 2"	24" x 2 1/2"	34'-2 1/2"	66'-0"	17'-8 1/2"	19'-0"	61'-0"	0.09	0.13	0.09	0.31	.05	0.36	4 3/8"
Northbound																		
G1	125'-0 1/4"	17" x 3/4"	17" x 1 1/2"	24" x 1"	None	24" x 2"	28'-11 1/8"	68'-0"	21'-5 1/8"	0	83'-0"	0.07	0.12	0.09	0.28	.05	0.33	4"
G2	123'-3 1/8"	14" x 3/4"	14" x 1 1/2"	23" x 1"	None	23" x 1 1/2"	27'-6 1/8"	69'-0"	20'-0 1/2"	0	68'-0"	0.08	0.24	0.03	0.35	.05	0.40	4 3/4"
G3	121'-6"	14" x 3/4"	14" x 1 1/2"	23" x 1"	None	23" x 1 1/2"	26'-8"	69'-0"	21'-2"	0	68'-0"	0.07	0.23	0.03	0.33	.04	0.37	4 1/2"
G4	119'-8 1/8"	17" x 3/4"	17" x 1 1/2"	24" x 1"	None	24" x 2"	26'-3 1/8"	68'-0"	18'-9 1/8"	0	83'-0"	0.06	0.10	0.08	0.24	.04	0.28	3 3/8"

S.D.L. = superimposed dead load, includes weight of railing and parapet.

V.C.C. = vertical curve correction

LEGEND

- # SUPERSTRUCTURE PHOTOS
- # SUBSTRUCTURE PHOTOS

WELD SIZE TABLE	
Thickness of Flange	W. Size of fillet weld joining web to flange
1/2" and under	5/16"
over 1/2" to 2 1/4"	3/8"
over 2 1/4"	1/2"

PROJECT ENGINEER B.L. Parker
IN CHARGE OF E. Eckel
DESIGNED BY E. Eckel
DESIGN CHECKED BY James A. Smith
DETAILED BY J.F. Darcy
DETAIL CHECKED BY J.F. Darcy

BRIDGE NO. 2

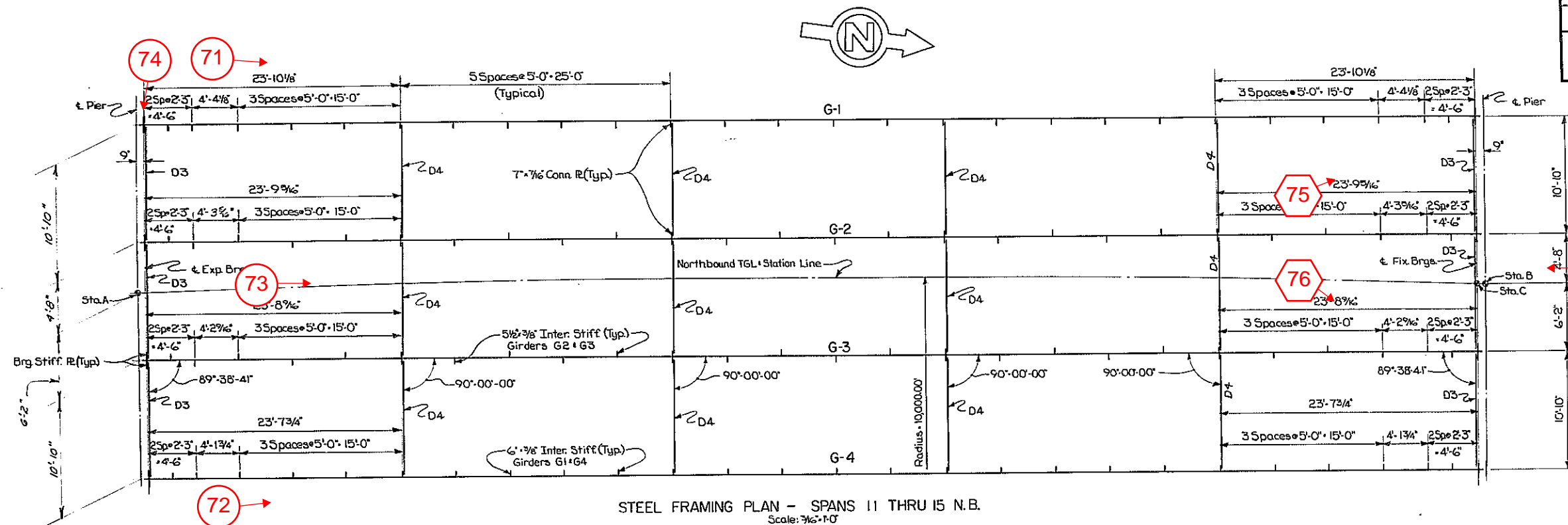
INTERSTATE ROUTE 481 OVER DEWITT YARDS

SPAN 10 NORTHBOUND

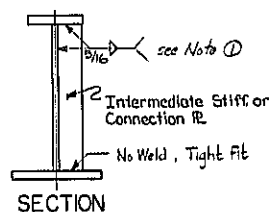
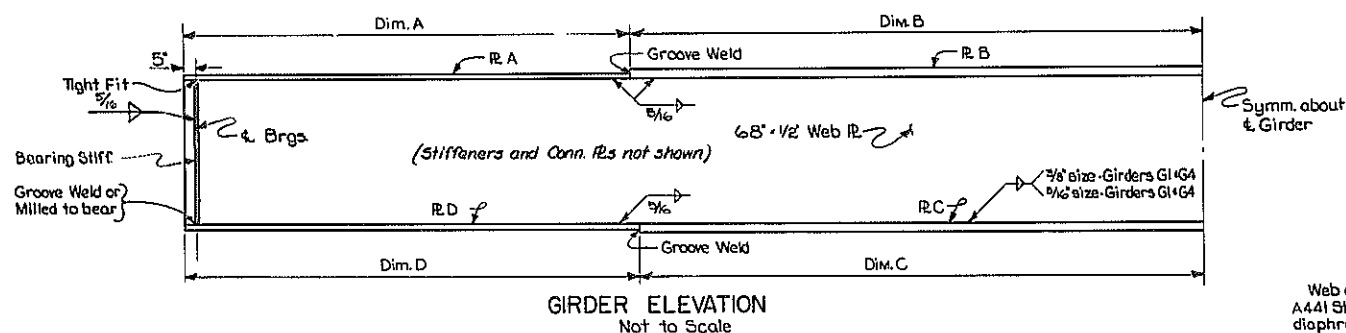
BIN 1093572

PHOTO LOCATION PLAN

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	1-690-3(28) 1-481-2(116)	206	309
INTERSTATE ROUTE CONNECTION 570 BUTTERNUT INTERCHANGE (PHASE 2) ONONDAGA COUNTY				

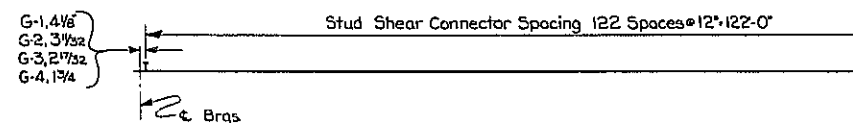


LOCATION	AZIMUTH
to Pier *10 N.B.	262°-45'-51"
to Pier *11 N.B.	263°-28'-36"
to Pier *12 N.B.	264°-11'-13"
to Pier *13 N.B.	264°-53'-51"
to Pier *14 N.B.	265°-36'-28"
to Fixed Bearings to North Abutment N.B.	266°-19'-06"
to girders, Span 11 N.B.	353°-07'-17"
to girders, Span 12 N.B.	353°-49'-55"
to girders, Span 13 N.B.	354°-32'-32"
to girders, Span 14 N.B.	355°-15'-10"
to girders, Span 15 N.B.	355°-57'-47"



Web and Flanges shall be A.S.T.M. Designation A441 Steel. Stiffeners, connection plates and diaphragms shall be A.S.T.M. Designation A36 Steel.

Note D: Where connection plates are used in pairs, the fillet weld at top of stiffener is optional. See Note "Sup 4" in the Superstructure Notes.



STUD SHEAR CONNECTOR SPACING
Not to Scale

NORTHBOUND GIRDER TABLE - SPANS 10 THRU 14

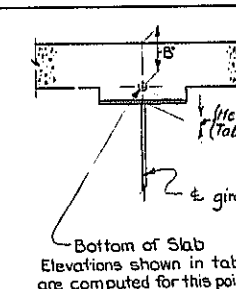
GIRDER	SPAN LENGTH C. TO C. BEARINGS	FLANGE SIZE				FLANGE DIMENSIONS				BEARING STIFF. 2 R's Required at each end of girder	INTERMEDIATE STIFFENER SIZE
		R A	R B	R C	R D	A	B	C	D		
G1	122'-8 1/8"	16" x 3/4"	16" x 1/2"	23" x 2"	23" x 1"	23" x 3/8"	33" x 6"	40" x 6"	21" x 3/8"	9" x 7/8"	6" x 3/8"
G2	122'-6 7/8"	13" x 3/4"	13" x 1/2"	22" x 1 1/2"	22" x 1"	28" x 2 1/2"	33" x 6"	33" x 6"	28" x 2 1/2"	8" x 3/4"	5 1/2" x 3/8"
G3	122'-5 1/4"	13" x 3/4"	13" x 1/2"	22" x 1 1/2"	22" x 1"	28" x 1 1/2"	33" x 6"	33" x 6"	28" x 1 1/2"	8" x 3/4"	5 1/2" x 3/8"
G4	122'-3 1/4"	16" x 3/4"	16" x 1/2"	23" x 2"	23" x 1"	28" x 3/4"	33" x 6"	40" x 6"	21" x 3/8"	9" x 7/8"	6" x 3/8"

SPAN	GIRDER	DEFLECTIONS (FT.)				CAMBER	
		STEEL	SLAB	S.D.L.	TOTAL	V.C.C.	TOTAL
Spans 11, 12, 13 Northbound	G1-G4	.07	.12	.08	.27	.04	.31
Span 14 Northbound	G1-G4	.08	.12	.08	.27	.04	.31
Span 15 Northbound	G1-G4	.07	.12	.08	.27	.04	.31

V.C.C. - Vertical Curve Camber
S.D.L. (Superimposed Dead Load) Includes weight of parapet & railing.

BOTTOM OF SLAB ELEVATIONS

NORTHBOUND				
GIRDER	SPAN	C. TO C. BEARINGS	C. TO C. BEARINGS	C. TO C. BEARINGS
G-1	11	441.36	440.02	438.57
G-2	11	441.16	439.80	438.34
G-3	11	440.94	439.57	438.12
G-4	11	440.72	439.34	437.89
G-1	12	438.53	436.98	435.34
G-2	12	438.30	436.75	435.12
G-3	12	438.08	436.52	434.89
G-4	12	437.85	436.30	434.66
G-1	13	435.30	433.57	431.75
G-2	13	435.07	433.34	431.53
G-3	13	434.85	433.12	431.30
G-4	13	434.62	432.89	431.08
G-1	14	431.71	429.80	427.98
G-2	14	431.48	429.57	427.75
G-3	14	431.26	429.34	427.53
G-4	14	431.03	429.12	427.30
G-1	15	427.93	426.25	424.71
G-2	15	427.71	426.02	424.48
G-3	15	427.48	425.80	424.26
G-4	15	427.26	425.57	424.03



LEGEND

- # SUPERSTRUCTURE PHOTOS
- # SUBSTRUCTURE PHOTOS

TABLE OF STATIONS

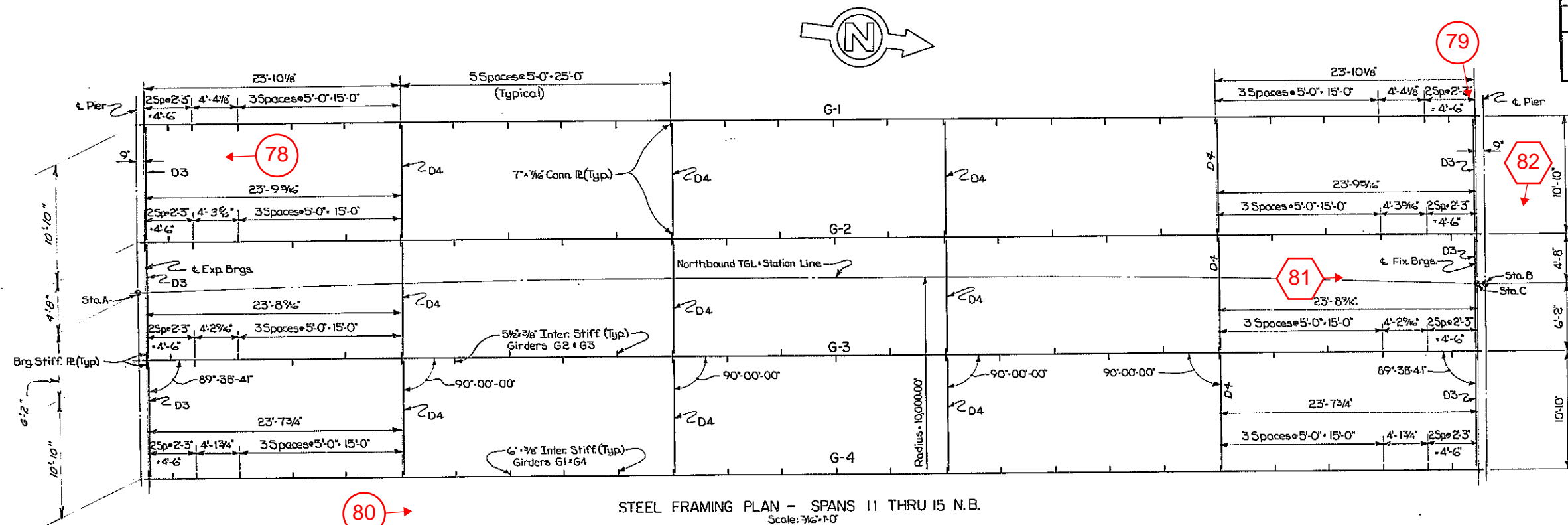
SPAN	STATION A		STATION B		STATION C	
	STATION	C.	STATION	C.	STATION	C.
11(NB)	230+98.76	to Pier *10(NB)	232+22.76	to Pier *11(NB)		
12(NB)	232+22.76	to Pier *11(NB)	233+46.76	to Pier *12(NB)		
13(NB)	233+46.76	to Pier *12(NB)	234+70.76	to Pier *13(NB)		
14(NB)	234+70.76	to Pier *13(NB)	235+94.76	to Pier *14(NB)		
15(NB)	235+94.76	to Pier *14(NB)		237+18.01	to Fix Brgs (NAB)	

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS
SPAN 11 NORTHBOUND
BIN 1093572
PHOTO LOCATION PLAN

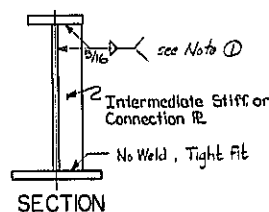
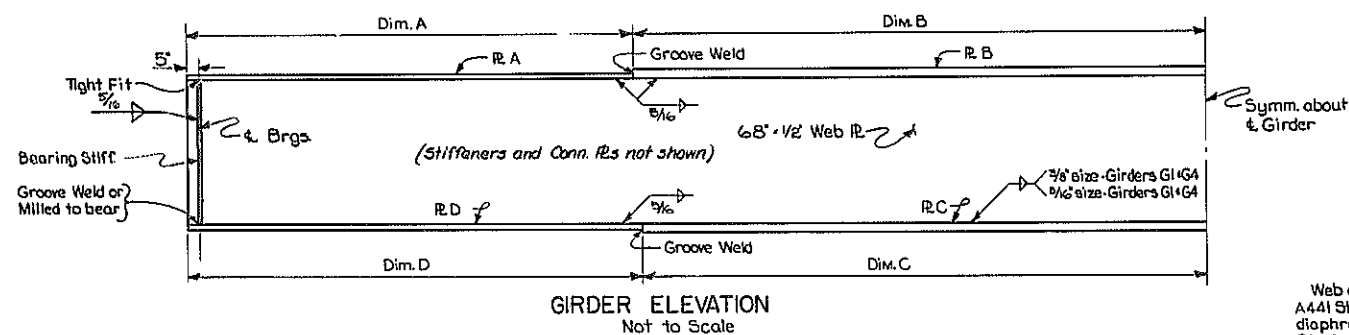
PROJECT ENGINEER: E.L. Parker
IN CHARGE OF: J.R. Sherman
DESIGNED BY: N. Tappes
DESIGN CHECKED BY: D. Smith
DETAILED BY: J.R. Darcy
DETAIL CHECKED BY: J.R. Darcy

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	1-690-3(28) 1-481-2(116)	206	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

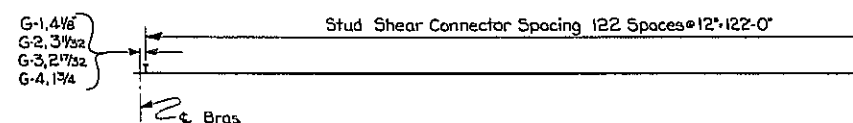


LOCATION	AZIMUTH
± Pier *10 N.B.	262°-45'-51"
± Pier *11 N.B.	263°-28'-36"
± Pier *12 N.B.	264°-11'-13"
± Pier *13 N.B.	264°-53'-51"
± Pier *14 N.B.	265°-36'-28"
± Fixed Bearings @ North Abutment N.B.	266°-19'-06"
± girders, Span 11 N.B.	353°-07'-17"
± girders, Span 12 N.B.	353°-49'-55"
± girders, Span 13 N.B.	354°-32'-32"
± girders, Span 14 N.B.	355°-15'-10"
± girders, Span 15 N.B.	355°-57'-47"



Web and Flanges shall be A.S.T.M. Designation A441 Steel. Stiffeners, connection plates and diaphragms shall be A.S.T.M. Designation A36 Steel.

Note D: Where connection plates are used in pairs, the fillet weld at top of stiffener is optional. See Note "Sup 4" in the Superstructure Notes.



NORTHBOUND GIRDER TABLE - SPANS 10 THRU 14

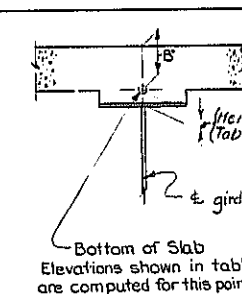
GIRDER	SPAN LENGTH CL TO CL BEARINGS	FLANGE SIZE				FLANGE DIMENSIONS				BEARING STIFF. 2 Rls Required at each end of girder	INTERMEDIATE STIFFENER SIZE
		RL A	RL B	RL C	RL D	A	B	C	D		
G1	122'-8 1/8"	16" x 3/4"	16" x 1/2"	23" x 2"	23" x 1"	23'-3 1/8"	33'-6"	40'-6"	21'-3 1/8"	9" x 7/8"	6" x 3/8"
G2	122'-6 7/16"	13" x 3/4"	13" x 1/2"	22" x 1 1/2"	22" x 1"	28'-2 5/16"	33'-6"	28'-2 5/16"	8" x 3/4"	5 1/2" x 3/8"	5 1/2" x 3/8"
G3	122'-5 1/4"	13" x 3/4"	13" x 1/2"	22" x 1 1/2"	22" x 1"	28'-1 1/4"	33'-6"	28'-1 1/4"	8" x 3/4"	5 1/2" x 3/8"	5 1/2" x 3/8"
G4	122'-3 1/4"	16" x 3/4"	16" x 1/2"	23" x 2"	23" x 1"	28'-0 1/4"	33'-6"	40'-6"	21'-0 1/4"	9" x 7/8"	6" x 3/8"

SPAN	GIRDER	DEFLECTIONS (FT.)				CAMBER (FT.)	
		STEEL	SLAB	S.D.L.	TOTAL	V.C.C.	TOTAL
Spans 11, 12 & 13 Northbound	G1 & G4	.07	.12	.08	.27	.04	.31
Span 14 Northbound	G1 & G4	.08	.12	.08	.27	.04	.31
Span 15 Northbound	G1 & G4	.07	.12	.08	.27	.04	.31

V.C.C. - Vertical Curve Camber
S.D.L. (Superimposed Dead Load) Includes weight of parapet & railing.

BOTTOM OF SLAB ELEVATIONS

NORTHBOUND				
GIRDER	SPAN	CL EXP. BRGS.	CL SPAN	CL FIX. BRGS.
G-1	11	441.36	440.02	438.57
G-2	11	441.16	439.80	438.34
G-3	11	440.94	439.57	438.12
G-4	11	440.72	439.34	437.89
G-1	12	438.53	436.98	435.34
G-2	12	438.30	436.75	435.12
G-3	12	438.08	436.52	434.89
G-4	12	437.85	436.30	434.66
G-1	13	435.30	433.57	431.75
G-2	13	435.07	433.34	431.53
G-3	13	434.85	433.12	431.30
G-4	13	434.62	432.89	431.08
G-1	14	431.71	429.80	427.98
G-2	14	431.48	429.57	427.75
G-3	14	431.26	429.34	427.53
G-4	14	431.03	429.12	427.30
G-1	15	427.93	426.25	424.71
G-2	15	427.71	426.02	424.48
G-3	15	427.48	425.80	424.26
G-4	15	427.26	425.57	424.03



LEGEND

- # SUPERSTRUCTURE PHOTOS
- # SUBSTRUCTURE PHOTOS

TABLE OF STATIONS

SPAN	STATION A		STATION B		STATION C	
	STATION	CL	STATION	CL	STATION	CL
11(NB)	230+98.76	± Pier *10(NB)	232+22.76	± Pier *11(NB)		
12(NB)	232+22.76	± Pier *11(NB)	233+46.76	± Pier *12(NB)		
13(NB)	233+46.76	± Pier *12(NB)	234+70.76	± Pier *13(NB)		
14(NB)	234+70.76	± Pier *13(NB)	235+94.76	± Pier *14(NB)		
15(NB)	235+94.76	± Pier *14(NB)		237+18.01	± Fix Brgs NAB	

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

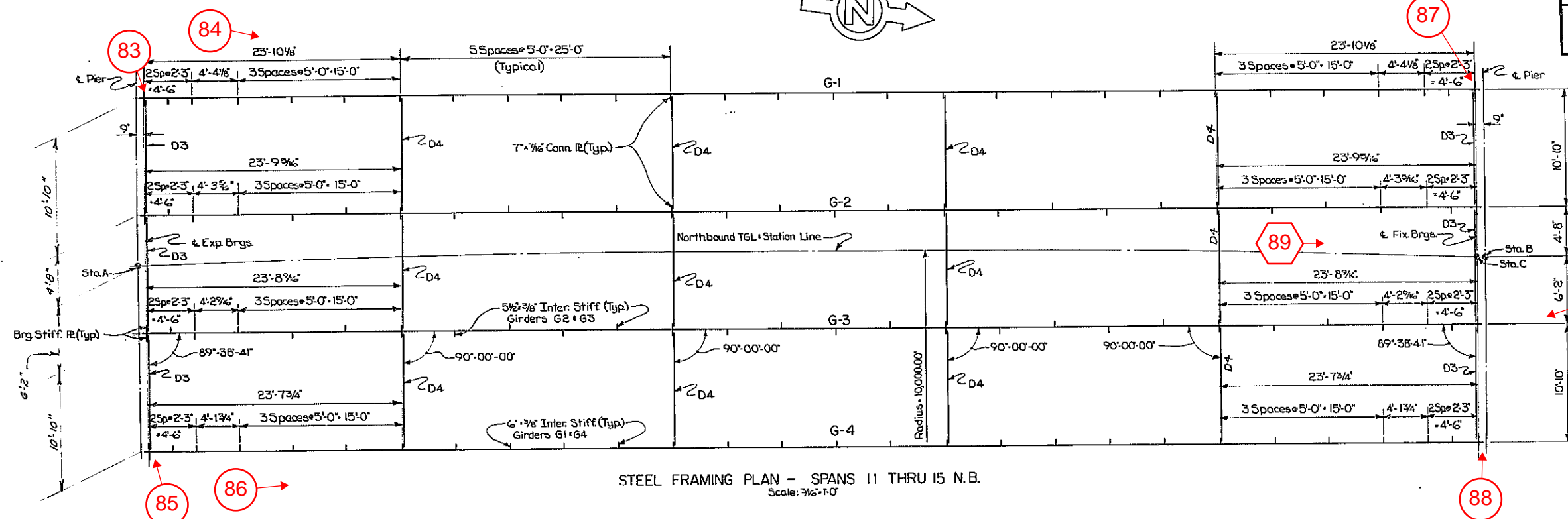
SPAN 12 NORTHBOUND

BIN 1093572

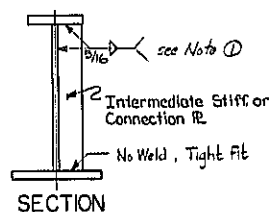
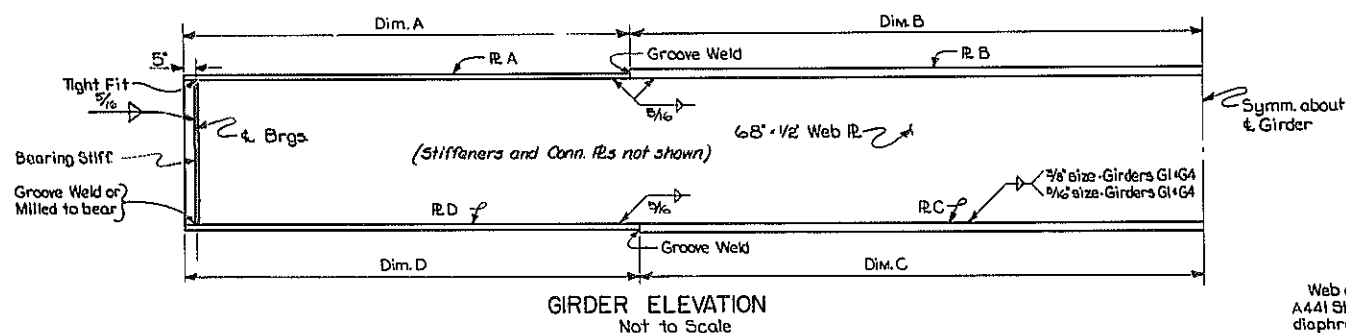
PHOTO LOCATION PLAN

PROJECT ENGINEER: E.L. Parker
IN CHARGE OF: J.R. Sherman
DESIGNED BY: N. Tappes
DESIGN CHECKED BY: D. Smith
DETAILED BY: J.R. Darcy
DETAIL CHECKED BY: J.R. Darcy

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	1-690-3(28) 1-481-2(116)	206	309
INTERSTATE ROUTE CONNECTION 570 BUTTERNUT INTERCHANGE (PHASE 2) ONONDAGA COUNTY				

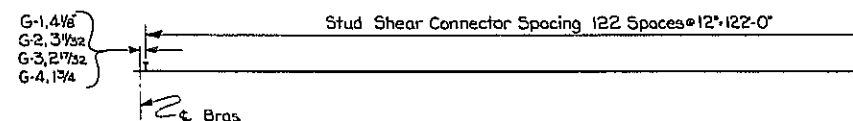


LOCATION	AZIMUTH
to Pier * 10 N.B.	262°-45'-51"
to Pier * 11 N.B.	263°-28'-36"
to Pier * 12 N.B.	264°-11'-13"
to Pier * 13 N.B.	264°-53'-51"
to Pier * 14 N.B.	265°-36'-28"
to Fixed Bearings to North Abutment N.B.	266°-19'-06"
to Girders, Span 11 N.B.	353°-07'-17"
to Girders, Span 12 N.B.	353°-49'-55"
to Girders, Span 13 N.B.	354°-32'-32"
to Girders, Span 14 N.B.	355°-15'-10"
to Girders, Span 15 N.B.	355°-57'-47"



Web and Flanges shall be A.S.T.M. Designation A441 Steel. Stiffeners, connection plates and diaphragms shall be A.S.T.M. Designation A36 Steel.

Note D: Where connection plates are used in pairs, the fillet weld at top of stiffener is optional. See Note "Sup 4" in the Superstructure Notes.



STUD SHEAR CONNECTOR SPACING
Not to Scale

NORTHBOUND GIRDER TABLE - SPANS 10 THRU 14

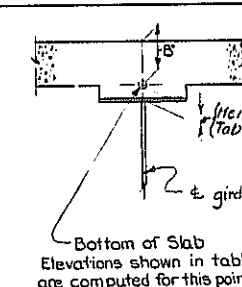
GIRDER	SPAN LENGTH C. TO C. BEARINGS	FLANGE SIZE				FLANGE DIMENSIONS				BEARING STIFF. 2 R's Required at each end of girder	INTERMEDIATE STIFFENER SIZE
		R A	R B	R C	R D	A	B	C	D		
G1	122'-8 1/8"	16'-3 1/4"	16'-1 1/2"	23'-2"	23'-1"	23'-3 1/8"	33'-6"	40'-6"	21'-3 1/8"	9'-7 1/8"	6'-3 1/8"
G2	122'-6 7/16"	13'-3 1/4"	13'-1 1/2"	22'-1 1/2"	22'-1"	28'-2 1/8"	33'-6"	33'-6"	28'-2 1/8"	8'-3 1/4"	5 1/2'-3/8"
G3	122'-5 1/4"	13'-3 1/4"	13'-1 1/2"	22'-1 1/2"	22'-1"	28'-1 1/8"	33'-6"	33'-6"	28'-1 1/8"	8'-3 1/4"	5 1/2'-3/8"
G4	122'-3 1/8"	16'-3 1/4"	16'-1 1/2"	23'-2"	23'-1"	28'-0 1/4"	33'-6"	40'-6"	21'-0 1/4"	9'-7 1/8"	6'-3 1/8"

SPAN	GIRDER	DEFLECTIONS (FT.)				CAMBER	
		STEEL	SLAB	S.D.L.	TOTAL	V.C.C.	TOTAL
Spans 11, 12 & 13 Northbound	G1-G4	.07	.12	.08	.27	.04	.31
Span 14 Northbound	G1-G4	.08	.12	.08	.27	.04	.31
Span 15 Northbound	G1-G4	.07	.12	.08	.27	.04	.31

V.C.C. - Vertical Curve Camber
S.D.L. (Superimposed Dead Load) Includes weight of parapet & railing.

BOTTOM OF SLAB ELEVATIONS

NORTHBOUND				
GIRDER	SPAN	C. TO C. BEARINGS	C. TO C. BEARINGS	C. TO C. BEARINGS
G-1	11	441.36	440.02	438.57
G-2	11	441.16	439.80	438.34
G-3	11	440.94	439.57	438.12
G-4	11	440.72	439.34	437.89
G-1	12	438.53	436.98	435.34
G-2	12	438.30	436.75	435.12
G-3	12	438.08	436.52	434.89
G-4	12	437.85	436.30	434.66
G-1	13	435.30	433.57	431.75
G-2	13	435.07	433.34	431.53
G-3	13	434.85	433.12	431.30
G-4	13	434.62	432.89	431.08
G-1	14	431.71	429.80	427.98
G-2	14	431.48	429.57	427.75
G-3	14	431.26	429.34	427.53
G-4	14	431.03	429.12	427.30
G-1	15	427.93	426.25	424.71
G-2	15	427.71	426.02	424.48
G-3	15	427.48	425.80	424.26
G-4	15	427.26	425.57	424.03



LEGEND

- # SUPERSTRUCTURE PHOTOS
- # SUBSTRUCTURE PHOTOS

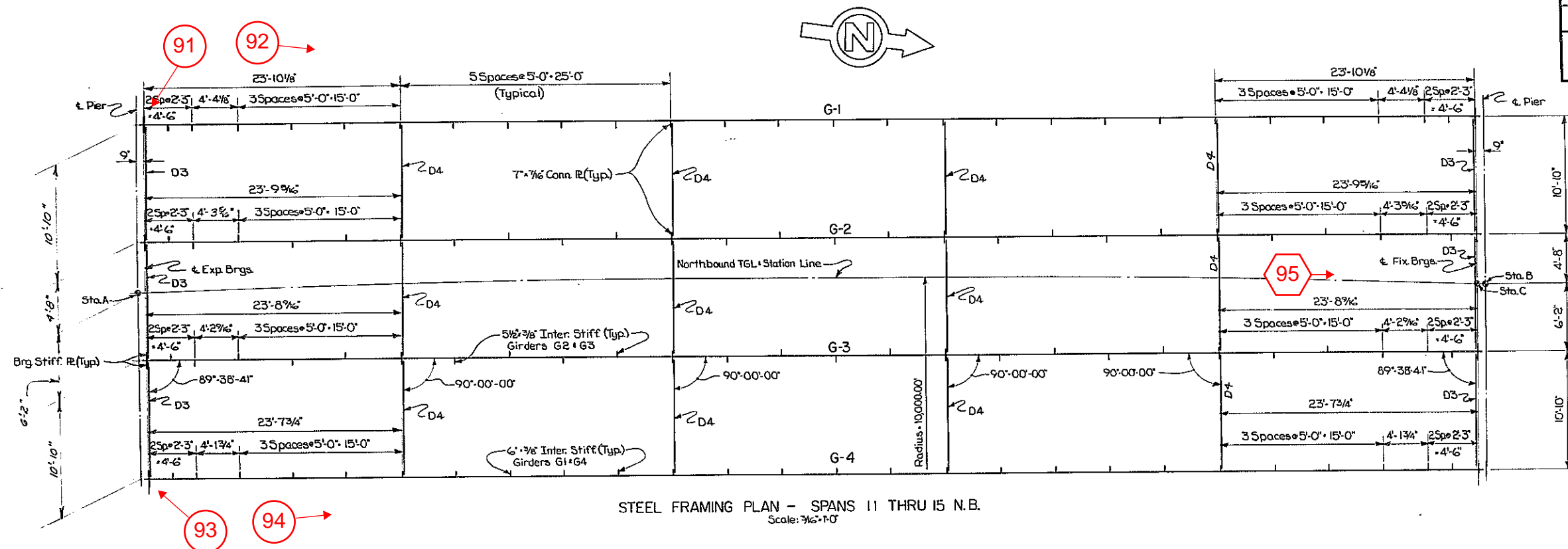
TABLE OF STATIONS

SPAN	STATION A		STATION B		STATION C	
	STATION	C.	STATION	C.	STATION	C.
11(NB)	230+98.76	to Pier * 10(NB)	232+22.76	to Pier * 11(NB)		
12(NB)	232+22.76	to Pier * 11(NB)	233+46.76	to Pier * 12(NB)		
13(NB)	233+46.76	to Pier * 12(NB)	234+70.76	to Pier * 13(NB)		
14(NB)	234+70.76	to Pier * 13(NB)	235+94.76	to Pier * 14(NB)		
15(NB)	235+94.76	to Pier * 14(NB)		237+18.01	to Fix Brgs. NAB	

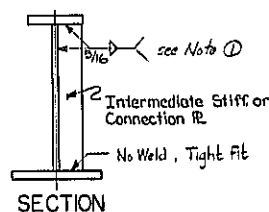
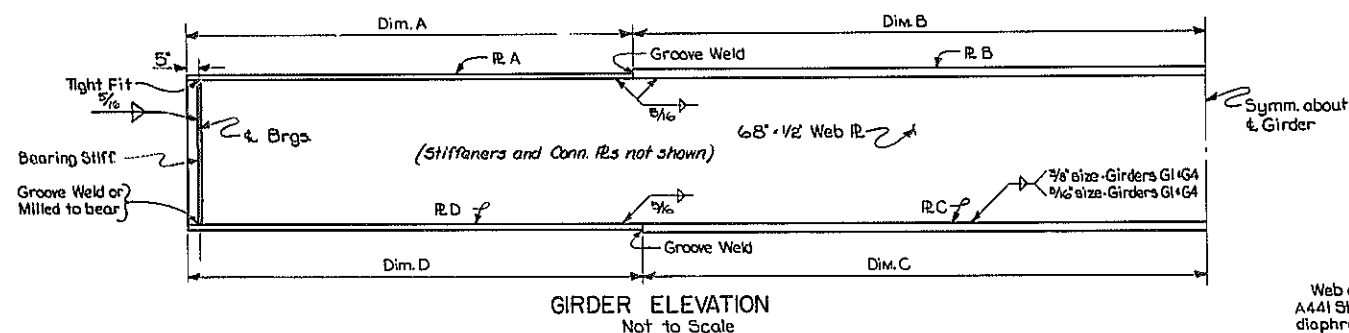
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS
SPAN 13 NORTHBOUND
BIN 1093572
PHOTO LOCATION PLAN

PROJECT ENGINEER: E.L. Parker
IN CHARGE OF: J.R. Sherman
DESIGNED BY: N. Tappes
DESIGN CHECKED BY: D. Smith
DETAILED BY: J.R. Darcy
DETAIL CHECKED BY: J.R. Darcy

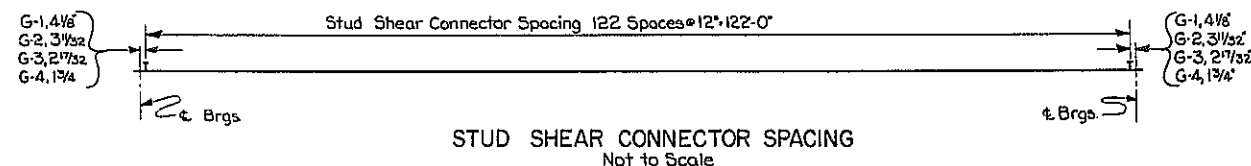
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	1-690-3(28) 1-481-2(116)	206	309
INTERSTATE ROUTE CONNECTION 570 BUTTERNUT INTERCHANGE (PHASE 2) ONONDAGA COUNTY				



LOCATION	AZIMUTH
± Pier * 10 N.B.	262°-45'-51"
± Pier * 11 N.B.	263°-28'-36"
± Pier * 12 N.B.	264°-11'-13"
± Pier * 13 N.B.	264°-53'-51"
± Pier * 14 N.B.	265°-36'-28"
± Fixed Bearings @ North Abutment N.B.	266°-19'-06"
± girders, Span 11 N.B.	353°-07'-17"
± girders, Span 12 N.B.	353°-49'-55"
± girders, Span 13 N.B.	354°-32'-32"
± girders, Span 14 N.B.	355°-15'-10"
± girders, Span 15 N.B.	355°-57'-47"



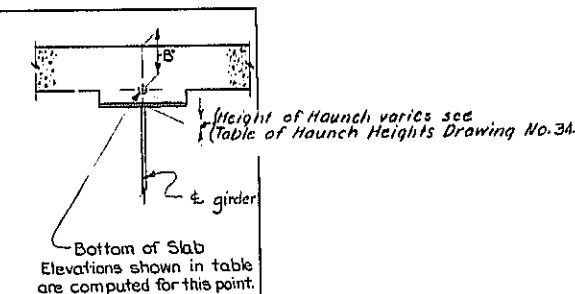
Web and Flanges shall be A.S.T.M. Designation A441 Steel. Stiffeners, connection plates and diaphragms shall be A.S.T.M. Designation A36 Steel.



Note D: Where connection plates are used in pairs, the fillet weld at top of stiffener is optional. See Note "Sup 4" in the Superstructure Notes.

BOTTOM OF SLAB ELEVATIONS

NORTHBOUND				
GIRDER	SPAN	± EXP. BRGS.	± SPAN	± FIX. BRGS.
G-1	11	441.36	440.02	438.57
G-2	11	441.16	439.80	438.34
G-3	11	440.94	439.57	438.12
G-4	11	440.72	439.34	437.89
G-1	12	438.53	436.98	435.34
G-2	12	438.30	436.75	435.12
G-3	12	438.08	436.52	434.89
G-4	12	437.85	436.30	434.66
G-1	13	435.30	433.57	431.75
G-2	13	435.07	433.34	431.53
G-3	13	434.85	433.12	431.30
G-4	13	434.62	432.89	431.08
G-1	14	431.71	429.80	427.98
G-2	14	431.48	429.57	427.75
G-3	14	431.26	429.34	427.53
G-4	14	431.03	429.12	427.30
G-1	15	427.93	426.25	424.71
G-2	15	427.71	426.02	424.48
G-3	15	427.48	425.80	424.26
G-4	15	427.26	425.57	424.03



LEGEND

- # SUPERSTRUCTURE PHOTOS
- # SUBSTRUCTURE PHOTOS

NORTHBOUND GIRDER TABLE - SPANS 10 THRU 14

GIRDER	SPAN LENGTH	FLANGE SIZE				FLANGE DIMENSIONS				BEARING STIFF. 2 R's Required at each end of girder	INTERMEDIATE STIFFENER SIZE
	C. TO C. BEARINGS	R. A	R. B	R. C	R. D	A	B	C	D		
G1	122'-8 1/8"	16'-3 1/4"	16'-1 1/2"	23'-2"	23'-1"	23'-3 1/8"	33'-6"	40'-6"	21'-3 1/8"	9'-7 1/8"	6'-3 1/8"
G2	122'-6 7/16"	13'-3 1/4"	13'-1 1/2"	22'-1 1/2"	22'-1"	28'-2 1/8"	33'-6"	33'-6"	28'-2 1/8"	8'-3 1/4"	5 1/2'-3 1/8"
G3	122'-5 1/4"	13'-3 1/4"	13'-1 1/2"	22'-1 1/2"	22'-1"	28'-1 1/8"	33'-6"	33'-6"	28'-1 1/8"	8'-3 1/4"	5 1/2'-3 1/8"
G4	122'-3 1/8"	16'-3 1/4"	16'-1 1/2"	23'-2"	23'-1"	28'-0 1/4"	33'-6"	40'-6"	21'-0 1/4"	9'-7 1/8"	6'-3 1/8"

SPAN	GIRDER	DEFLECTIONS (FT.)				CAMBER	
		STEEL	SLAB	S.D.L.	TOTAL	V.C.C.	TOTAL
Spans 11, 12, 13 Northbound	G1-G4	.07	.12	.08	.27	.04	.31
Span 14 Northbound	G1-G4	.07	.12	.08	.27	.04	.31
Span 15 Northbound	G1-G4	.07	.12	.08	.27	.04	.31

V.C.C. - Vertical Curve Camber
S.D.L. (Superimposed Dead Load) Includes weight of parapet & railing.

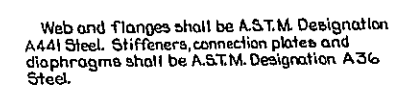
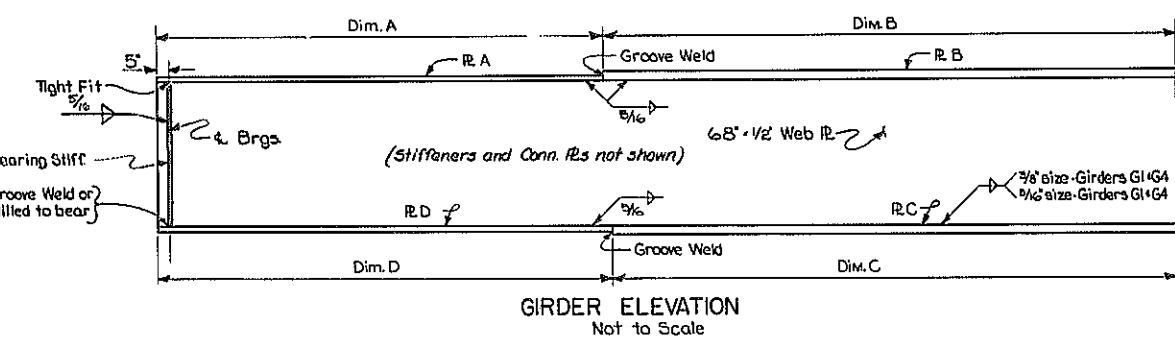
TABLE OF STATIONS

SPAN	STATION A		STATION B		STATION C	
	STATION	±	STATION	±	STATION	±
11(NB)	230+98.76	± Pier * 10(NB)	232+22.76	± Pier * 11(NB)		
12(NB)	232+22.76	± Pier * 11(NB)	233+46.76	± Pier * 12(NB)		
13(NB)	233+46.76	± Pier * 12(NB)	234+70.76	± Pier * 13(NB)		
14(NB)	234+70.76	± Pier * 13(NB)	235+94.76	± Pier * 14(NB)		
15(NB)	235+94.76	± Pier * 14(NB)		237+18.01	± Fix Brg. (NAB)	

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS
SPAN 14 NORTHBOUND
BIN 1093572
PHOTO LOCATION PLAN

PROJECT ENGINEER: E.L. Parker
IN CHARGE OF: J.R. Sherman
DESIGNED BY: N. Topper
DESIGN CHECKED BY: D. Smith
DETAILED BY: J.R. Darcy
DETAIL CHECKED BY: J.R. Darcy

LOCATION	AZIMUTH
£ Pier *10 N.B.	262°-45'-57"
£ Pier *11 N.B.	263°-28'-36"
£ Pier *12 N.B.	264°-11'-13"
£ Pier *13 N.B.	264°-53'-58"
£ Pier *14 N.B.	265°-36'-28"
£ Fixed Bearings • North Abutment N.B.	266°-19'-06"
£ girders, Span 11 N.B.	353°-07'-17"
£ girders, Span 12 N.B.	353°-49'-55"
£ girders, Span 13 N.B.	354°-32'-32"
£ girders, Span 14 N.B.	355°-15'-10"
£ girders, Span 15 N.B.	355°-57'-47"



Bottom of Slab
Elevations shown in table
are computed for this point.


		DEFLECTIONS (FT.)					CAMBER	
		STEEL	SLAB	S.D.L.	TOTAL	V.C.C. (FT.)	TOTAL FT. IN.	
Spans 11,12,+13 Northbound	G1 * G4	.07	.12	.08	.27	.04	.31 3 3/4"	
	G2+G3	.08	.24	.03	.35	.04	.39 4 5/8"	
Span 14 Northbound	G1 * G4	.07	.12	.08	.27	-.04	.23 2 3/4"	
	G2+G3	.08	.24	.03	.35	-.04	.31 3 3/4"	
Span 15 Northbound	G1 * G4	.07	.12	.08	.27	-.07	.20 2 1/8"	
	G2+G3	.08	.24	.03	.35	-.07	.28 3 1/8"	


V.C.C. = Vertical Curve Camber
S.D.L. (SuperImposed Dead Load) Includes weight of
parapet railing

TABLE OF STATIONS						
SPAN	STATION A		STATION B		STATION C	
	STATION	C	STATION	C	STATION	C
11WB	230+93.76	4.Pier+10NB	232+22.76	4.Pier+11NB		
12WB	232+22.76	4.Pier+11NB	233+46.76	4.Pier+12NB		
13WB	233+46.76	4.Pier+12NB	234+70.76	4.Pier+13NB		
14WB	234+70.76	4.Pier+13NB	235+94.76	4.Pier+14NB		
15WB	235+94.76	4.Pier+14NB			237+18.01	4.Fix Bgs NAD

PROJECT ENGINEER R. L. Parker
IN CHARGE OF J. B. Sherman
DESIGNED BY N. Topper
DESIGN CHECKED BY D. Smith
DETAILED BY J. F. Darcy
DETAIL CHECKED BY F. W. Galt

LEGEND

 SUPERSTRUCTURE PHOTOS

 SUBSTRUCTURE PHOTOS

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DENWITT YARDS
SPAN 15 NORTHBOUND
BIN 1093572
PHOTO LOCATION PLAN

Steel Framing Plan



DESCRIPTION: BEGIN ABUTMENT – LOOKING SOUTH

PHOTO 1



DESCRIPTION: BEGIN, RIGHT WINGWALL – LOOKING
SOUTHWEST – MAP-CRACKED
THROUGHOUT.

PHOTO 2



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I-481 NB over CSX BIN 1093572



DESCRIPTION: SPAN 1: FRAMING – LOOKING SOUTH –
PAINT FLAKING

PHOTO 3



DESCRIPTION: SPAN 1: GIRDER 1 – EXTERIOR FASCIA
BOTTOM FLANGE DETERIORATION

PHOTO 4



DESCRIPTION: SPAN 1: GIRDER 1 (END) – BEARING STIFFENER AND WEB DETERIORATION

PHOTO 5



DESCRIPTION: SPAN 1: GIRDER 1 (END) – EXTERIOR FASCIA
BEARING STIFFENER AND WEB DETERIORATION

PHOTO 6



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DESCRIPTION: PIER NO. 1 – BEGIN FACE

DESCRIPTION: PIER NO. 1 – END FACE



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DESCRIPTION: SPAN 2: FRAMING – LOOKING SOUTH

PHOTO 9



DESCRIPTION: SPAN 2: GIRDER 1 (BEGIN) – BOTTOM FLANGE DETERIORATION

PHOTO 10



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DESCRIPTION: SPAN 2: GIRDER 1 (END) – EXTERIOR
WEB AND STIFFENER DETERIORATION

PHOTO 11



DESCRIPTION: SPAN 2: GIRDER 4 (END) – BEARING
STIFFENER AND WEB DETERIORATION

PHOTO 12



DESCRIPTION: SPAN 2: GIRDER 2 (END) – END CROSS FRAME AND LATERAL BRACING CONNECTION

PHOTO 13



DESCRIPTION: SPAN 2: BAY 1 (END) – END CROSS FRAME AND LATERAL BRACING FRAMING

PHOTO 14



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DESCRIPTION: PIER NO. 2 – BEGIN FACE

PHOTO 15



DESCRIPTION: PIER NO. 2 – END FACE

PHOTO 16



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DESCRIPTION: SPAN 3: GIRDER 1 – LOOKING NORTH
BOTTOM FLANGE DETERIORATION

PHOTO 17



DESCRIPTION: SPAN 3: GIRDER 4 – LOOKING NORTH
BOTTOM FLANGE DETERIORATION

PHOTO 18



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DESCRIPTION: SPAN 3: GIRDER 1 – WEB
DETERIORATION – 2" DIA. HOLE IN WEB

PHOTO 19



DESCRIPTION: SPAN 3: GIRDER 1 – WEB
DETERIORATION – 2" DIA. HOLE IN WEB

PHOTO 20



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DESCRIPTION: PIER NO. 3 – BEGIN FACE

PHOTO 21



DESCRIPTION: PIER NO. 3 – END FACE

PHOTO 22



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DESCRIPTION: PIER NO. 3: COLUMN 3 – BEGIN FACE

PHOTO 23



DESCRIPTION: PIER NO. 3: CAP BEAM – END FACE

PHOTO 24



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DESCRIPTION: SPAN 4: GIRDER 4 – GENERAL
OVERVIEW – LOOKING NORTH
BOTTOM FLANGE DETERIORATION

PHOTO 25



DESCRIPTION: SPAN 4: FRAMING – LOOKING NORTH

PHOTO 26



DESCRIPTION: SPAN 4: GIRDER 1 (END) – BEARING
STIFFENER AND WEB DETERIORATION
– WEB/FLANGE SEPARATION

PHOTO 27



DESCRIPTION: SPAN 4: GIRDER 1 (END) – BEARING
STIFFENER AND WEB DETERIORATION
– WEB/FLANGE SEPARATION

PHOTO 28



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DESCRIPTION: PIER NO. 4 – BEGIN FACE –
OBSTRUCTED BY SALT STORAGE SHED

PHOTO 29



DESCRIPTION: PIER NO. 4 – END FACE

PHOTO 30



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DESCRIPTION: PIER NO. 4 – COLUMN 3 – PREVIOUS
REPAIR LEACHING SALT AT REPAIR
JOINT

PHOTO 31



DESCRIPTION: PIER NO. 4 – COLUMN 3 – END FACE
SPALL WITH EXPOSED AND CORRODED
REBAR

PHOTO 32



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DESCRIPTION: SPAN 5: GIRDER 4 – GENERAL
OVERVIEW – LOOKING NORTH
BOTTOM FLANGE DETERIORATION

PHOTO 33



DESCRIPTION: SPAN 5: GIRDER 1 – LOOKING SOUTH
BOTTOM FLANGE DETERIORATION

PHOTO 34



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DESCRIPTION: SPAN 5: GIRDER 4 (BEGIN) – GIRDER
END ELEVATION

WEB AND BEARING STIFFENER
DETERIORATION

PHOTO 35

DESCRIPTION: SPAN 5: BAY 3 – LOOKING SOUTH
BAY FRAMING

PHOTO 36



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DESCRIPTION: PIER NO. 5 – BEGIN FACE

PHOTO 37



DESCRIPTION: PIER NO. 5 – END FACE

PHOTO 38



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DESCRIPTION: SPAN 6: GIRDER 1 – LOOKING NORTH
BOTTOM FLANGE DETERIORATION



DESCRIPTION: SPAN 6: GIRDER 4 – LOOKING NORTH
BOTTOM FLANGE DETERIORATION



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DESCRIPTION: SPAN 6: BAY 3 – LOOKING SOUTH
BOTTOM STRUT OF CROSS FRAME
BUCKLED

PHOTO 41



DESCRIPTION: SPAN 6: BAY 3 – BOTTOM STRUT OF
CROSS FRAME BUCKLED

PHOTO 42



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DESCRIPTION: SPAN 6: BAY 3 – LOOKING SOUTH
BOTTOM STRUT OF CROSS FRAME
BUCKLED

PHOTO 43



DESCRIPTION: SPAN 6: GENERAL FRAMING – LOOKING SOUTH

PHOTO 44



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DESCRIPTION: PIER NO. 6 – BEGIN FACE

PHOTO 45



DESCRIPTION: PIER NO. 6 – END FACE

PHOTO 46



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DESCRIPTION: SPAN 7: GIRDER 1 – LOOKING NORTH
BOTTOM FLANGE DETERIORATION

PHOTO 47



DESCRIPTION: SPAN 7: GIRDER 4 – LOOKING NORTH
BOTTOM FLANGE DETERIORATION

PHOTO 48



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DESCRIPTION: SPAN 7: BAY 1 – LOOKING SOUTH

PHOTO 49



DESCRIPTION: SPAN 7: BAY 2 (BEGIN) – LOOKING EAST
BOTTOM STRUT OF CROSS FRAME IS
BOWED/BUCKLED.

PHOTO 50



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DESCRIPTION: PIER NO. 7 – BEGIN FACE

PHOTO 51



DESCRIPTION: PIER NO. 7 – END FACE

PHOTO 52



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DESCRIPTION: SPAN 8: GIRDER 1 – LOOKING NORTH
BOTTOM FLANGE DETERIORATION

PHOTO 53

DESCRIPTION: SPAN 8: GIRDER 4 – LOOKING NORTH
BOTTOM FLANGE DETERIORATION

PHOTO 54



DESCRIPTION: SPAN 8: BAY 2 – LOOKING NORTH

PHOTO 55



DESCRIPTION: SPAN 8: GIRDER 4 – LOOKING WEST
BEARING STIFFENER AND WEB
DETERIORATION

PHOTO 56



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DESCRIPTION: PIER NO. 8 – BEGIN FACE

PHOTO 57



DESCRIPTION: PIER NO. 8 – END FACE

PHOTO 58



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DESCRIPTION: SPAN 9: GIRDER 1 – LOOKING SOUTH
BOTTOM FLANGE DETERIORATION

PHOTO 59

DESCRIPTION: SPAN 9: GIRDER 4 – LOOKING NORTH
BOTTOM FLANGE DETERIORATION

PHOTO 60



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DESCRIPTION: SPAN 9: BAY 2 – LOOKING NORTH

PHOTO 61



DESCRIPTION: SPAN 9: GIRDER 1 – LOOKING EAST
BEARING STIFFENER AND WEB
DETERIORATION

PHOTO 62



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DESCRIPTION: PIER NO. 9 – BEGIN FACE

PHOTO 63



DESCRIPTION: PIER NO. 9 – END FACE

PHOTO 64



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DESCRIPTION: PIER NO. 9 – CAP BEAM (TOP)
DELAMINATED AND SPALLED
CONCRETE

PHOTO 65



DESCRIPTION: SPAN 10: BAY 1 – LOOKING SOUTH

PHOTO 66



DESCRIPTION: SPAN 10: GIRDER 1 – LOOKING SOUTH
BOTTOM FLANGE AND WEB
DETERIORATION

PHOTO 67



DESCRIPTION: SPAN 10: GIRDER 4 – LOOKING SOUTH
BOTTOM FLANGE DETERIORATION

PHOTO 68



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DESCRIPTION: PIER NO. 10 – BEGIN FACE

PHOTO 69



DESCRIPTION: PIER NO. 10 – END FACE

PHOTO 70



DESCRIPTION: SPAN 11: GIRDER 1 – LOOKING NORTH
BOTTOM FLANGE AND WEB
DETERIORATION

PHOTO 71



DESCRIPTION: SPAN 11: GIRDER 4 – LOOKING NORTH
BOTTOM FLANGE DETERIORATION

PHOTO 72



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DESCRIPTION: SPAN 11: BAY 2 – LOOKING NORTH

PHOTO 73



DESCRIPTION: SPAN 11: GIRDER 1 – LOOKING EAST
BEARING STIFFENER AND WEB
DETERIORATION

PHOTO 74



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DESCRIPTION: PIER NO. 11 – BEGIN FACE

PHOTO 75



DESCRIPTION: PIER NO. 11 – BEGIN FACE

PHOTO 76



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DESCRIPTION: PIER NO. 11 – END FACE

PHOTO 77



DESCRIPTION: SPAN 12: BAY 1 – LOOKING SOUTH
END CROSS FRAME

PHOTO 78



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I-481 NB over CSX BIN 1093572



DESCRIPTION: SPAN 12: GIRDER 1 (END) – LOOKING
SOUTHEAST
BOTTOM FLANGE AND WEB
DETERIORATION – GIRDER END

PHOTO 79



DESCRIPTION: SPAN 12: GIRDER 4 – LOOKING NORTH
BOTTOM FLANGE DETERIORATION

PHOTO 80



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DESCRIPTION: PIER NO. 12 – BEGIN FACE

PHOTO 81



DESCRIPTION: PIER NO. 12 – END FACE

PHOTO 82



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DESCRIPTION: SPAN 13: GIRDER 1 (BEGIN) – FASCIA
BOTTOM FLANGE AND WEB
DETERIORATION – GIRDER END

PHOTO 83



DESCRIPTION: SPAN 13: GIRDER 1 – LOOKING NORTH
BOTTOM FLANGE DETERIORATION

PHOTO 84



DESCRIPTION: SPAN 13: GIRDER 4 (BEGIN) – FASCIA
BOTTOM FLANGE AND WEB
DETERIORATION – GIRDER END

PHOTO 85



DESCRIPTION: SPAN 13: GIRDER 4 – LOOKING NORTH
BOTTOM FLANGE DETERIORATION

PHOTO 86



DESCRIPTION: SPAN 13: GIRDER 1 (END) – FASCIA
BOTTOM FLANGE AND WEB
DETERIORATION – GIRDER END

PHOTO 87



DESCRIPTION: SPAN 13: GIRDER 4 (END) – FASCIA
BOTTOM FLANGE AND WEB
DETERIORATION – GIRDER END

PHOTO 88



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DESCRIPTION: PIER NO. 13 – BEGIN FACE

PHOTO 89



DESCRIPTION: PIER NO. 13 – END FACE

PHOTO 90



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DESCRIPTION: SPAN 14: GIRDER 1 (BEGIN) – FASCIA
BOTTOM FLANGE AND WEB
DETERIORATION – GIRDER END

PHOTO 91



DESCRIPTION: SPAN 14: GIRDER 1 – LOOKING NORTH
BOTTOM FLANGE DETERIORATION

PHOTO 92



DESCRIPTION: SPAN 14: GIRDER 4 (BEGIN) – FASCIA
BOTTOM FLANGE AND WEB
DETERIORATION – GIRDER END

PHOTO 93



DESCRIPTION: SPAN 14: GIRDER 4 – LOOKING NORTH
BOTTOM FLANGE DETERIORATION

PHOTO 94



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DESCRIPTION: PIER NO. 14 – BEGIN FACE

PHOTO 95



DESCRIPTION: PIER NO. 14 – END FACE

PHOTO 96



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DESCRIPTION: PIER NO. 14 – END FACE

PHOTO 97



DESCRIPTION: SPAN 15: GIRDER 1 (BEGIN) – INTERIOR
BOTTOM WEB DETERIORATION –
GIRDER END

PHOTO 98



DESCRIPTION: SPAN 15: GIRDER 4 (BEGIN) – INTERIOR
BOTTOM FLANGE AND WEB
DETERIORATION – GIRDER END

PHOTO 99



DESCRIPTION: SPAN 15: GIRDER 1 – LOOKING SOUTH
BOTTOM FLANGE DETERIORATION

PHOTO 100



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DESCRIPTION: SPAN 15: GIRDER 1 (END) – FASCIA
BOTTOM FLANGE AND WEB
DETERIORATION – GIRDER END

PHOTO 101



DESCRIPTION: SPAN 15: GIRDER 1 – LOOKING NORTH
BOTTOM FLANGE DETERIORATION

PHOTO 102



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DESCRIPTION: SPAN 15: GIRDER 4 (END) – FASCIA
BOTTOM FLANGE AND WEB
DETERIORATION – GIRDER END

PHOTO 103



DESCRIPTION: SPAN 15: GIRDER 4 – LOOKING SOUTH
BOTTOM FLANGE DETERIORATION

PHOTO 104



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DESCRIPTION: END ABUTMENT – LOOKING NORTH

PHOTO 105



DESCRIPTION: END ABUTMENT – NE WINGWALL
MAP CRACKING THROUGHOUT,
SPALLING AT CHEEKWALL

PHOTO 106